

October 18, 2005

Mr. Jim Tischler  
North Coast Water Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

**RE: Quarterly Groundwater Monitoring and  
Ozone Remediation System Status Report, Third Quarter 2005  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue, Santa Rosa, California  
ENSR Project No. 06940-268-100**

Dear Mr. Tischler:

ENSR Corporation (ENSR) has been authorized by Union Oil Company of California (Unocal) to prepare this report summarizing quarterly groundwater monitoring and ozone remediation system status at the above referenced site located at 1075 Santa Rosa Avenue, Santa Rosa, California (**Figure 1**). This report presents the results of quarterly groundwater monitoring and ozone remediation system status through the third quarter 2005. The work was performed in accordance with the field methods and procedures included in **Attachment A**. The locations of former and current site features are illustrated on **Figure 2**.

### **Groundwater Level Measurements**

Depth to groundwater measurements were recorded in monitoring wells MW-7, MW-12A, MW-12B, MW-13A, MW-13B, MW-14A, MW-14B, and MW-15 on August 23, 2005 (**Table 1**). Depth to groundwater measurements were recorded in monitoring wells MW-1 through MW-6 and MW-8 through MW-11 on August 24, 2005 (**Table 1**). Separate phase hydrocarbons (SPH) have historically been detected in monitoring well MW-4 since 1993. SPH has varied in thickness from a sheen to approximately one-half foot. SPH was not detected in well MW-4 during this monitoring event. Monitoring wells MW-1 through MW-11 and MW-15 are screened to approximately 24 feet below ground surface (bgs) and monitor the shallow groundwater zone. Monitoring wells MW-12A, MW-13A, and MW-14A are screened from 50 to 55 feet bgs and monitor the intermediate zone. Monitoring wells MW-12B, MW-13B, and MW-14B are screened from 80 to 85 feet bgs and monitor the deep zone. Groundwater measurements collected were used to construct three groundwater elevation contour maps for the site. The shallow, intermediate, and deep zone groundwater elevation contours are illustrated on **Figures 3 through 5**, respectively.



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On August 23 and 24, 2005, the groundwater flow direction in the shallow zone was toward the southwest with a hydraulic gradient of 0.011 feet per foot (ft/ft) (**Figure 3**). The groundwater flow direction in the intermediate zone was toward the southwest with a hydraulic gradient of approximately 0.002 ft/ft (**Figure 4**). The groundwater flow direction for the deep zone was toward the south with a hydraulic gradient of approximately 0.02 ft/ft (**Figure 5**). The groundwater elevations were observed to be lower in all wells (ranging from 0.33 feet lower in MW-14A to 7.12 feet lower in MW-13B) as compared to the second quarter 2005 monitoring results. Copies of the groundwater sampling data sheets are included in **Attachment B** and a summary of groundwater elevations measured to date is presented in **Table 1**.

### **Groundwater Sampling and Analytical Results**

Groundwater samples were collected on August 23 and 24, 2005, from wells MW-1 through MW-11, MW-12A, MW-12B, MW-13A, MW-13B, MW-14A, MW-14B, and MW-15. The groundwater samples were submitted to California Laboratory Services (CLS) in Rancho Cordova, California (a state-certified laboratory) for analyses of total petroleum hydrocarbons as gasoline (TPHg) using Environmental Protection Agency (EPA) Method 8015 Modified. Analyses were also performed for benzene, toluene, ethylbenzene and total xylenes (BTEX), fuel oxygenate compounds methyl tertiary butyl ether (MTBE), tertiary-amyl methyl ether (TAME), tert butanol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), and 1,2-dichloroethane (1,2-DCA) using EPA Method 8260B.

Cumulative groundwater sampling analytical results are summarized in **Tables 1** through **4**. Concentrations of TPHg, benzene, and MTBE in groundwater sampled on August 23 and 24, 2005 are presented in **Figure 6**. Iso-concentration maps for TPHg, benzene, and MTBE are presented as **Figures 7, 8, and 9**, respectively. TPHg and benzene concentration trends in monitoring wells MW-3 and MW-8 as a function of time are presented in **Figures 10** and **11**. Laboratory analytical results with chain-of-custody documentation are included in **Attachment C**.

### **Ozone Microsparqe (C-Sparge™) Remediation System Description**

An ozone remediation system on site treats saturated soil and groundwater via a C-Sparge™ system. The C-Sparge™ system includes an ozone generator, an air compressor, and a Rainbird™ timer controller. The C-Sparge™ system uses ozone micro-sparging which is a process whereby ozone is entrained in air and introduced into the saturated zone. The ozone is injected at low flow rates of two to six cubic feet per minute through specially designed Spargepoints® to create "micro-bubbles." As these micro-bubbles rise within the saturated zone, dissolved volatile organic compounds (VOCs), including petroleum hydrocarbons, are oxidized. The oxygen released from the oxidation reactions encourages in-situ biodegradation of petroleum hydrocarbons.



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The system injects ozone with air in cycles using ten Spargepoints® (SP-1 through SP-10) to saturated soil and groundwater. SP-1 through SP-5 were installed in September 2003 to a depth of 18 feet bgs. SP-6 through SP-10 were installed in September 2003 to a depth of 20 feet bgs. Spargepoints® introduce ozone using a 2-foot long, 2-inch diameter micro-diffuser into the areas of highest dissolved petroleum hydrocarbon and VOC concentrations at the site. Each Spargepoint® is connected to the C-Sparge™ master unit through a length of dedicated high density polyethylene (HDPE) tubing installed below ground.

As shown in **Figure 2**, HDPE tubing from SP-1 and SP-3 was conveyed into the first junction box within a 2-inch, schedule-40 poly-vinyl-chloride (PVC) pipe conduit. From there the tubing was encased in a 6-inch schedule-40 PVC pipe conduit and conveyed to the second junction box. Tubing from SP-2, SP-4, SP-5, and SP-6 was pulled into the second junction box. Tubing from SP-1 through SP-6 was conveyed to the remediation compound in a 6-inch, schedule-40 PVC pipe conduit from the second junction box. Tubing from SP-7 through SP-10 was pulled into junction box number three through a 2-inch schedule-40 PVC pipe conduit, and from there conveyed to the remediation compound in a 6-inch, schedule-40 PVC pipe conduit. The two 6-inch, schedule-40 PVC pipe conduits conveying tubing from SP-1 through SP-10 were terminated in a 3-foot diameter well box within the remediation compound.

### **Ozone Microsparge (C-Sparge™) System Operation and Status**

From June 15 through September 27, 2005, the Rainbird™ timer controller schedule was set to cycle through each Spargepoint® six times per day, for 10 minutes per point, per cycle. There was a 20-minute rest period between cycles. The Rainbird™ timer settings were adjusted on September 28, 2005, to increase the removal of petroleum hydrocarbon contaminants in saturated soil and groundwater by cycling through each Spargepoint® six times per day, for 20 minutes per point, per cycle. A 40-minute rest time between each cycle is now programmed to allow the ozone generator and compressor to cool down.

Excluding temporary shut-downs for operational maintenance, the C-Sparge™ system has been operated continuously since June 2005. The system was temporarily shut down for approximately 48 hours in July while repairs were made to three vapor extraction well boxes. The system was also temporarily shut down for approximately 48 hours in August, because the site owner turned the power off for the entire site.

### **Ozone Microsparge (C-Sparge™) System Effectiveness**

The effectiveness of ozone micro-sparging is monitored by assessing dissolved oxygen (DO) concentrations (**Table 4**) and quarterly analysis of groundwater samples collected from monitoring wells MW-1 through MW-4, and MW-8. The TPHg and benzene concentration trends versus time in monitoring wells MW-3 and MW-8 are presented in **Figures 10 and 11**.



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Concentration trends in MW-4 are not graphed, since SPH had been frequently detected in this well. No SPH was detected in MW-4 during the third quarter 2005 monitoring event. The third quarter 2005 groundwater monitoring results show that the DO concentration in MW-2 has increased and that the concentrations of TPHg and BTEX have decreased when compared to the second quarter 2005 monitoring results.

The DO concentration in MW-1 increased slightly when compared to the second quarter 2005 groundwater monitoring result. The DO concentration in MW-8 decreased when compared to the second quarter 2005 groundwater monitoring result. The concentrations of TPHg and benzene in monitoring wells MW-1 and MW-8 increased. The concentration increases are believed to be due to lower groundwater elevations. When compared to the second quarter 2005 monitoring results, groundwater elevations in MW-1 and MW-8 decreased by 3.92 feet and 4.17 feet, respectively. The concentrations of TPHg and benzene in monitoring well MW-3 did not change significantly when compared to the second quarter 2005 monitoring results.

### **Soil Vapor Extraction System Description**

C-Sparge™ system operation began on November 18, 2003. On June 4, 2004, the system was shut down as a result of the presence of VOC vapors escaping from various C-Sparge™ points, monitoring wells, and PVC conduits that house the C-Sparge™ HDPE lines. A work plan to install a small Soil Vapor Extraction (SVE) system to abate the escaping VOC vapors was prepared by ENSR and approved by the Regional Water Quality Control Board, North Coast Region in a letter dated October 15, 2004. The SVE system was installed in May 2005 and became fully operational in June 2005 under a Bay Area Air Quality Management District (BAAQMD) operating permit for plant number 16288.

The SVE system comprises a 1.74 horsepower Nash Elmo G200 blower, a 120-gallon knock-out tank, and two 200-pound granular activated carbon (GAC) canisters installed in series. Two six-inch conduits that convey the C-Sparge™ HDPE lines to the C-Sparge™ master unit and three 2-inch schedule-40 PVC lines linked to the existing vapor extraction wells (VE-1 through VE-3) were connected to the SVE system. The three 4-inch diameter vapor extraction wells were installed in 1994 to a depth of 30 feet bgs. A vacuum measuring approximately 20-60 inches of water is applied to the system. The effluent vapor stream is passed through the GAC before being discharged to the atmosphere. The emissions are monitored weekly according to requirements of the BAAQMD permit.



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### **Soil Vapor Extraction System Operation and Status**

The SVE system operated for approximately 2,131 hours from June 15 through September 20, 2005. The system was temporarily shut down for approximately 48 hours in July 2005 while repairs were made to three vapor extraction well boxes. The system was also temporarily shut down for approximately 48 hours in August 2005 because the site owner turned the power off for the entire site.

The highest influent concentration of VOCs (reported as carbon-six) into the SVE system during the third quarter 2005 was 93 parts per million by volume on July 29, 2005.

### **Conclusions/Recommendations**

In the third quarter 2005 monitoring event, concentrations of TPHg were detected in six wells, ranging from 230 micrograms per liter ( $\mu\text{g/L}$ ) in well MW-7, to 47,000  $\mu\text{g/L}$  in well MW-4. Concentrations of benzene were detected in five wells, ranging from 13  $\mu\text{g/L}$  in well MW-3 to 8,500  $\mu\text{g/L}$  in well MW-4. Benzene was not detected in wells MW-5 through MW-7 during the third quarter 2005 monitoring event. Concentrations of MTBE were detected in five wells, ranging from 0.71  $\mu\text{g/L}$  in well MW-5 to 400  $\mu\text{g/L}$  in well MW-2. Petroleum hydrocarbon constituents were not detected above laboratory reporting limits in ten wells (MW-6, MW-9, MW-10, MW-11, MW-12A, MW-12B, MW-13A, MW-13B, MW-14B, and MW-15) during the third quarter 2005. ENSR recommends continuation of the current quarterly groundwater monitoring regimen and that C-Sparge™ and SVE system operations be continued. ENSR plans to conduct a review of remediation system performance data in October 2005 to determine an approach for optimization of the C-Sparge™ and SVE remediation systems.

### **Future Work**

ENSR will continue operation and maintenance of the C-Sparge™ and SVE systems. The fourth quarter 2005 groundwater monitoring and sampling activities are scheduled for November 2005.

### **Remarks/Signatures**

The interpretations in this report represent our professional opinions and are based, in part, on the information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.



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If you have any questions regarding this project, please contact Mr. Paul Wadding at (916) 362-7100.

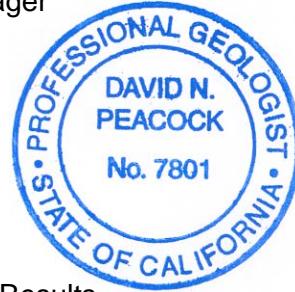
Sincerely,

**ENSR Corporation**

Yan Wang, E.I.T.  
Senior Staff Engineer

Paul Wadding, P.E.  
Project Manager

D. N. Peacock, Ph.D., P.G. # 7801  
Sr. Project Manager



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Attachments:

- A - Field Methods and Procedures
- B - Groundwater Sampling Data Sheets
- C - Laboratory Analytical Results with Chain-of-Custody Documentation

cc: Mr. John Frary, Union Oil Company of California  
Mr. Vincent Spiers, Site Owner  
Santa Rosa Fire Department



## TABLES

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product					NITRATES		
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	AS NO <sup>3</sup> (µg/L)
MW-1	04/20/89	--	--	--	4,000	48	27	22	64	--	--
	08/17/89	--	--	--	2,500	200	83	ND	56	--	--
	11/15/89	--	--	--	2,000	220	60	30	57	--	--
	03/26/90	--	--	--	5,900	270	150	180	240	--	--
	06/06/90	--	--	--	7,600	290	250	310	350	--	--
	09/27/90	--	--	--	ND	0.32	ND	ND	ND	--	--
	01/16/91	--	--	--	320	50	2.7	0.68	2.1	--	--
	04/30/91	--	--	--	700	17	2.1	ND	4.8	--	--
	07/25/91	--	--	--	2,700	360	110	100	130	--	--
	10/25/91	--	--	--	8,400	850	410	160	1,100	--	--
	01/30/92	--	--	--	3,600	630	270	170	170	--	--
	04/30/92	--	--	--	1,600	88	19	38	45	--	--
	07/22/92	--	--	--	2,700	260	95	100	120	--	--
	10/14/92	--	--	--	3,700	740	300	160	220	--	--
	01/13/93	--	--	--	380	1.4	3.7	1.0	1.4	--	--
154.80	04/12/93	8.91	145.89	0.00	1,400	91	16	55	37	--	--
	07/10/93	12.07	142.73	0.00	ND	ND	ND	ND	ND	--	--
154.51	10/12/93	15.30	139.21	0.00	12,000	400	680	590	1,000	--	--
	01/10/94	12.90	141.61	0.00	210	0.81	0.58	0.92	2.6	--	--
	04/20/94	11.09	143.42	0.00	380	3.7	2.6	1.5	1.3	--	--
	07/14/94	13.76	140.75	0.00	3,700	460	160	120	160	--	--
	10/18/94	16.46	138.05	0.00	8,000	940	410	270	380	--	--
	01/16/95	6.55	147.96	0.00	2,500	290	62	140	110	--	--
	04/13/95	6.73	147.78	0.00	4,700	150	45	170	140	--	--
	07/20/95	11.25	143.26	0.00	3,600	320	140	210	240	--	--
	10/17/95	14.62	139.89	0.00	14,000	770	320	270	530	-- <sup>1</sup>	--
	01/18/96	10.67	143.84	0.00	2,300	82	34	120	98	-- <sup>2</sup>	--
	04/17/96	8.06	146.45	0.00	2,800	53	24	120	74	-- <sup>2</sup>	--
	07/18/96	11.31	143.20	0.00	2,000	38	18	61	53	--	--
	10/18/96	14.32	140.19	0.00	3,500	570	140	150	160	--	--
	01/23/97	9.02	145.49	0.00	92,000	6,800	17,000	1,700	15,000	-- <sup>3</sup>	--
	04/24/97	9.71	144.80	0.00	2,600	67	15	130	66	--	--
	07/24/97	13.38	141.13	0.00	2,800	190	110	130	130	--	--

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WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-1	10/27-28/97	14.51	140.00	0.00	2,300	56	44	160	120	--	--	--
(cont)	01/21/98	6.73	147.78	0.00	5,300	48	32	280	130	94	--	--
	04/15/98	7.21	147.30	0.00	320	6.3	2.0	15	9.0	56/45 <sup>6</sup>	--	--
	07/15/98	10.05	144.46	0.00	1,000	65	ND <sup>5</sup>	91	45	5ND/13 <sup>6</sup>	--	--
	10/15/98	13.36	141.15	0.00	3,010	163	91.2	150	137	29.8/14.8 <sup>6</sup>	--	--
	01/27/99	9.62	144.89	0.00	2,200	92	13	94	35	140/8.5 <sup>6</sup>	--	--
	04/22/99	7.56	146.95	0.00	1,300	43	8.9	86	37	87/4.9 <sup>6</sup>	--	--
	07/22/99	12.17	142.34	0.00	2,800 <sup>10</sup>	170	72	120	92	120/10 <sup>11</sup>	--	--
	10/20/99	12.95	141.56	0.00	330 <sup>12</sup>	2.5	1.1	11	5.5	15	--	--
	01/05/00	13.28	141.23	0.00	ND	ND	ND	ND	ND	ND	--	--
	04/06/00	8.77	145.74	0.00	1,900 <sup>14</sup>	90	13	110	36	130	--	--
	07/21/00	11.81	142.70	0.00	1,770 <sup>12</sup>	174	50.2	99.5	70.4	54.9	--	--
	10/30/00	13.81	140.70	0.00	ND	ND	ND	ND	ND	71.8	--	--
	01/24/01	12.12	142.39	0.00	3,840 <sup>15</sup>	362	129	180	178	ND <sup>5</sup>	--	--
	04/25/01	9.70	144.81	0.00	1,360 <sup>16</sup>	49.7	6.02	38.4	12.8	11.5	--	--
	07/25/01	13.21	141.30	0.00	3,000	220	99	130	130	27	--	--
	10/24/01	15.63	138.88	0.00	4,600	690	210	300	290	800	--	--
154.51	01/23/02 <sup>20</sup>	8.55	145.96	0.00	--	--	--	--	--	--	--	--
	01/26/02	8.25	146.26	0.00	860	19	<5.0	34	9.5	80	--	--
	04/24/02	9.73	144.78	0.00	1,200	1.9	2.5	22	5.7	28	--	--
	07/24/02	12.53	141.98	0.00	150	<0.50	0.90	5.7	<0.50	190	--	--
	10/18/02	15.05	139.46	0.00	2,300	7.8	7.9	62	14	90	--	--
	02/03-04/03	8.40	146.11	0.00	310	0.91	0.80	<0.50	0.94	86	--	--
	04/24/03	8.92	145.59	0.00	120 <sup>24</sup>	1.2	<0.50	<0.50	<0.50	52/70 <sup>6</sup>	--	--
	07/30/03	11.62	142.89	0.00	<50	<0.50	<0.50	<0.50	<0.50	80/86 <sup>6</sup>	--	--
	10/16/03	14.02	140.49	0.00	<50	<0.50	<0.50	<0.50	<0.50	31/21 <sup>6</sup>	--	--
	01/07/04	8.12	146.39	0.00	1,300	200	45	77	49	4.26	--	--
157.01	05/11/04	10.08	146.93	0.00	500	85	9.9	36	18	1.2	--	--
	08/05/04	13.00	144.01	0.00	3,900 <sup>25</sup>	340	170	220	240	4.7	--	--
	11/03/04	13.59	143.42	0.00	6,500 <sup>25</sup>	800	330	480	500	5.5	--	--
	02/17/05	9.03	147.98	0.00	160 <sup>26</sup>	14	1.1	8.6	1.9	1.4 <sup>6</sup>	--	--
	05/16/05	7.42	149.59	0.00	720 <sup>26</sup>	86	5.5	42	9.3	2.8 <sup>6</sup>	--	--
	8/23-24/2005	11.34	145.67	0.00	2,400 <sup>26</sup>	300	120	150	150	<5.0 <sup>6</sup>	--	--

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WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
<b>MW-2</b>	04/20/89	--	--	--	68,000	10,000	9,100	1,900	6,600	--	--
	08/17/89	--	--	--	41,000	7,900	800	680	3,700	--	--
	11/15/89	--	--	--	4,700	1,100	1,800	530	2,100	--	--
	03/26/90	--	--	--	--	--	--	--	--	--	--
	06/06/90	--	--	--	120,000	11,000	20,000	3,800	22,000	--	--
	09/27/90	--	--	--	--	--	--	--	--	--	--
	01/16/91	--	--	--	--	--	--	--	--	--	--
	04/30/91	--	--	--	--	--	--	--	--	--	--
	07/25/91	--	--	--	--	--	--	--	--	--	--
	10/25/91	--	--	--	--	--	--	--	--	--	--
	01/30/92	--	--	--	69,000	11,000	14,000	3,000	14,000	--	--
	04/30/92	--	--	--	63,000	12,000	10,000	2,600	12,000	--	--
	07/22/92	--	--	--	76,000	12,000	11,000	2,700	12,000	--	--
	10/14/92	--	--	--	--	--	--	--	--	--	--
153.96	01/13/93	--	--	--	--	--	--	--	--	--	--
	04/12/93	9.13	144.84**	0.01	--	--	--	--	--	--	--
153.65	07/10/93	12.18	141.78	Sheen	53,000	5,700	12,000	2,500	11,000	--	--
	10/12/93	15.26	138.41**	0.02	--	--	--	--	--	--	--
	01/10/94	12.61	141.09**	0.07	--	--	--	--	--	--	--
	04/20/94	11.02	142.64**	0.01	--	--	--	--	--	--	--
	07/14/94	13.31	140.37**	0.04	--	--	--	--	--	--	--
	10/18/94	15.95	137.70	0.00	90,000	12,000	8,100	2,600	7,900	--	--
	01/16/95	6.85	146.82**	0.02	--	--	--	--	--	--	--
	04/13/95	6.79	146.86	Sheen	80,000	11,000	13,000	2,500	11,000	--	--
	07/20/95	10.88	142.77	Sheen	72,000	13,000	12,000	2,800	11,000	--	--
	10/17/95	14.08	139.57	<0.01/Sheen	200,000	11,000	9,100	2,100	11,000	-- <sup>1</sup>	--
	01/18/96	10.86	142.79	Sheen	540,000	12,000	17,000	8,800	43,000	-- <sup>2</sup>	--
	04/17/96	8.09	145.56	<0.01/Sheen	64,000	10,000	8,900	2,300	8,700	-- <sup>2</sup>	--
	07/18/96	11.00	142.65	0.00	68,000	5,400	4,900	2,000	6,000	-- <sup>2</sup>	--
	10/18/96	13.55	140.10	Sheen	55,000	10,000	4,700	1,900	5,000	--	--
	01/23/97	8.95	144.70	Sheen	120,000	6,800	19,000	1,600	16,000	-- <sup>3</sup>	--
	04/24/97	9.66	143.99	Sheen	64,000	12,000	5,500	2,400	5,500	--	--
	07/24/97	12.80	140.85	<0.01/Sheen	67,000	8,200	5,000	1,900	4,400	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-2	10/27-28/97	14.15	139.50	Sheen	240,000	7,600	13,000	4,300	24,000	--	--
(cont)	01/21/98 <sup>8</sup>	6.84	146.81	0.00/Sheen	86,000	9,900	7,100	2,100	13,000	1,400	--
	04/15/98 <sup>8</sup>	7.33	146.32	0.00	81,000	8,300	9,700	2,300	11,000	2,300/49 <sup>6</sup>	--
	07/15/98 <sup>8</sup>	9.86	143.79	0.00	70,000	10,000	5,600	2,300	7,900	5ND/420 <sup>6</sup>	--
	10/15/98 <sup>8</sup>	12.74	140.91	0.00	74,400	11,400	4,430	2,330	4,880	767/ND <sup>5,6</sup>	--
	01/27/99 <sup>8</sup>	9.63	144.02	0.00/Sheen	110,000	11,000	11,000	5,100	19,000	4,700/190 <sup>6</sup>	--
	04/22/99	7.48	146.17	0.00	76,000	10,000	6,000	2,300	8,700	2,700/270 <sup>6</sup>	--
	07/22/99 <sup>8</sup>	11.64	142.01	0.00	65,000	10,000	5,700	2,100	6,900	5ND/340 <sup>11</sup>	--
	10/20/99 <sup>8</sup>	12.56	141.09	0.00	68,000 <sup>12</sup>	6,000	4,800	2,800	11,000	ND <sup>5</sup>	--
	01/05/00 <sup>8</sup>	12.66	140.99	0.00	51,200 <sup>12</sup>	4,460	4,600	1,680	7,200	ND <sup>5</sup>	--
	04/06/00 <sup>8</sup>	8.85	144.80	0.00/Sheen	91,000 <sup>12</sup>	8,200	12,000	3,500	15,000	2,400	--
	07/21/00 <sup>8</sup>	11.40	142.25	0.00/Sheen	57,900 <sup>12</sup>	9,290	7,120	2,320	7,770	ND <sup>5</sup>	--
153.65	10/30/00 <sup>8</sup>	13.34	140.31	0.00	50,200 <sup>12</sup>	4,870	4,280	2,050	7,840	1,190	--
	01/24/01 <sup>8</sup>	11.75	141.90	0.00	96,600 <sup>15</sup>	8,820	6,490	2,770	6,760	ND <sup>5</sup>	--
	04/25/01 <sup>8</sup>	9.46	144.19	0.00	78,500 <sup>17</sup>	9,400	13,700	3,480	14,700	ND <sup>5</sup>	--
	07/25/01 <sup>8</sup>	12.75	140.90	0.00	62,000	4,200	5,600	2,200	9,700	<1,200	--
	10/24/01 <sup>8</sup>	15.09	138.56	0.00	84,000	6,200	6,300	2,400	9,600	3,300	--
	01/23/02 <sup>8,20</sup>	8.17	145.48	0.00	--	--	--	--	--	--	--
	01/26/02 <sup>8</sup>	7.92	145.73	0.00	45,000	4,400	4,900	1,800	6,700	290	--
	04/24/02 <sup>8</sup>	9.37	144.28	0.00	64,000	6,100	7,500	2,400	11,000	<250	--
	07/24/02 <sup>8</sup>	12.45	141.20	0.00	54,000	4,000	4,900	2,300	9,400	270	--
	10/18/02	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--
	02/03-04/03 <sup>8</sup>	8.26	145.39	0.00	61,000	6,000	6,000	2,200	10,000	<250	--
	04/24/03	8.36	145.29	0.00	41,000	5,500	6,200	2,200	9,300	<400/<100 <sup>6</sup>	--
	07/30/03 <sup>8</sup>	11.34	142.31	0.00	35,000	3,200	3,600	1,800	6,500	1,600/220 <sup>6</sup>	--
	10/16/03 <sup>8</sup>	13.84	139.81	0.00	41,000	3,200	3,200	1,600	7,800	390/86 <sup>6</sup>	--
	01/07/04	7.96	145.69	0.00	46,000	6,200	1,900	1,400	7,000	330	--
156.18	05/11/04	10.75	145.43	0.00	69,000	1,200	1,300	1,500	3,100	280	--
	08/05/04	12.55	143.63	0.00	37,000 <sup>25</sup>	3,600	380	1,200	3,100	15	--
	11/03/04	13.01	143.17	0.00	20,000 <sup>25</sup>	3,200	330	1,100	2,200	360	--
	02/17/05	8.93	147.25	0.00	22,000	1,800	900	910	5,500	100 <sup>6</sup>	--
	05/16/05	7.51	148.67	0.00	17,000	4,500	520	960	2,700	110 <sup>6</sup>	--
	8/23-24/2005	11.11	145.07	0.00	15,000 <sup>26</sup>	2,900	140	580	990	400 <sup>6</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product					NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-3	04/20/89	--	--	--	21,000	900	260	870	1,800	--
	08/17/89	--	--	--	16,000	3,400	480	740	2,400	--
	11/15/89	--	--	--	9,400	1,700	240	180	310	--
	03/26/90	--	--	--	22,000	3,200	450	970	1,600	--
	06/06/90	--	--	--	11,000	2,100	280	350	480	--
	09/27/90	--	--	--	2,000	570	45	22	46	--
	01/16/91	--	--	--	3,100	840	57	95	90	--
	04/30/91	--	--	--	6,700	690	110	250	380	--
	07/25/91	--	--	--	3,800	800	110	200	230	--
	10/25/91	--	--	--	3,700	1,300	43	130	59	--
	01/30/92	--	--	--	7,700	2,200	140	410	330	--
	04/30/92	--	--	--	21,000	1,300	310	1,400	2,900	--
	07/22/92	--	--	--	4,400	640	54	130	160	--
	10/14/92	--	--	--	1,600	250	5.2	6.1	14	--
154.19	01/13/93	--	--	--	13,000	290	20	400	460	--
	04/12/93	8.45	145.74	Sheen	18,000	730	250	910	1,800	--
153.86	07/10/93	11.52	142.67	0.00	5,500	180	33	200	280	--
	10/12/93	14.69	139.17	0.00	17,000	800	240	930	1,500	--
	01/10/94	12.45	141.41	0.00	7,700	200	26	260	270	--
	04/20/94	10.51	143.35	0.00	1,300	37	71	590	910	--
	07/14/94	13.14	140.72	0.00	3,900	310	59	220	270	--
	10/18/94	15.83	138.03	0.00	2,200	140	15	61	50	--
	01/16/95	6.45	147.41	0.00	25,000	710	200	1,200	2,300	--
	04/13/95	6.30	147.56	0.00	23,000	670	270	1,400	2,700	--
	07/20/95	10.67	143.19	0.00	13,000	1,400	310	1,200	2,000	--
	10/17/95	13.99	139.87	0.00	3,700	320	36	130	110	-- <sup>1</sup>
	01/18/96	10.35	143.51	0.00	8,800	480	76	500	760	-- <sup>2</sup>
	04/17/96	7.67	146.19	0.00	5,000	330	100	420	540	-- <sup>2</sup>
	07/18/96	10.81	143.05	0.00	21,000	800	700	950	2,300	-- <sup>2</sup>
	10/18/96	13.63	140.23	0.00	1,100	81	15	67	60	--
	01/23/97	8.68	145.18	0.00	50,000	3,600	9,200	930	8,100	-- <sup>4</sup>
	04/24/97	9.21	144.65	0.00	13,000	530	220	1,000	1,500	--
	07/24/97	12.68	141.18	0.00	3,800	200	61	250	270	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-3	10/27-28/97	13.84	140.02	0.00	7,000	560	190	280	750	--	--	--
(cont)	01/21/98	6.54	147.32	0.00	710	15	1.8	6.7	11	70	--	--
	04/15/98	6.69	147.17	0.00	4,900	90	28	220	210	160/ND <sup>6</sup>	--	--
	07/15/98	9.31	144.55	0.00	9,100	650	290	1,400	1,900	200/20 <sup>6</sup>	--	--
	10/15/98	12.58	141.28	0.00	3,940	240	49.4	261	216	290/312 <sup>6</sup>	--	--
	01/27/99	9.22	144.64	0.00	14,000	540	190	1,100	1,300	570/19 <sup>6</sup>	--	--
	04/22/99	7.11	146.75	0.00	11,000	270	140	700	1,000	370/ND <sup>5,6</sup>	--	--
	07/22/99	11.41	142.45	0.00	6,000	280	110	500	580	310/220 <sup>11</sup>	--	--
	10/20/99	12.42	141.44	0.00	14,000 <sup>12</sup>	680	220	1,200	1,400	70	--	--
	01/05/00	12.55	141.31	0.00	8,840 <sup>12</sup>	324	114	671	628	ND <sup>4</sup>	--	--
153.86	04/06/00	8.13	145.73	0.00	10,000 <sup>12</sup>	200	150	730	730	420	--	--
	07/21/00	11.11	142.75	0.00	3,250 <sup>12</sup>	114	58.4	333	353	147	--	--
	10/30/00	13.10	140.76	0.00	1,340 <sup>12</sup>	33.4	5.69	45.6	26.6	36.4	--	--
	01/24/01	11.53	142.33	0.00	3,600 <sup>15</sup>	115	36.6	266	228	180	--	--
	04/25/01	9.19	144.67	0.00	11,700 <sup>16,18</sup>	64.6	77.7	917	980	11.4	--	--
	07/25/01	12.46	141.40	0.00	1,900	39	25	110	100	140	--	--
	10/24/01	14.90	138.96	0.00	1,600	79	14	64	27	440	--	--
	01/23/02 <sup>20</sup>	8.05	145.81	0.00	--	--	--	--	--	--	--	--
	01/26/02	7.79	146.07	0.00	2,700	19	12	180	170	150	--	--
	04/24/02	9.16	144.70	0.00	10,000	73	110	680	730	51	--	--
	07/24/02	11.71	142.15	0.00	3,500	35	30	210	200	26	--	--
	10/18/02	14.18	139.68	0.00	5,000	130	49	320	280	140	--	--
	02/03-04/03	8.11	145.75	0.00	680	<0.50	1.8	3.9	8.7	12	--	--
	04/24/03	7.89	145.97	0.00	3,300	41	32	320	290	100/<10 <sup>6</sup>	--	--
	07/30/03	10.84	143.02	0.00	350	1.5	1.1	1.4	2.4	12/<2.0 <sup>6</sup>	--	--
	10/16/03	13.36	140.50	0.00	620	12	7.4	14	25	12/<2.0 <sup>6</sup>	--	--
	01/07/04	9.10	144.76	0.00	830	14	7.4	45	43	29	--	--
156.37	05/11/04	9.60	146.77	0.00	830	11	9.7	32	24	39	--	--
	08/05/04	12.23	144.14	0.00	1,200 <sup>25</sup>	14	9.2	22	16	76	--	--
	11/03/04	12.72	143.65	0.00	1,000 <sup>25</sup>	8.3	6.6	17	11	53	--	--
	02/17/05	8.49	147.88	0.00	1,100 <sup>26</sup>	4.1	2.1	42	37	7.3 <sup>6</sup>	--	--
	05/16/05	6.90	149.47	0.00	1,100 <sup>26</sup>	5.4	3.1	57	52	8.4 <sup>6</sup>	--	--
	8/23-24/2005	10.80	145.57	0.00	1,200 <sup>26</sup>	13	4.3	36	26	48 <sup>6</sup>	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product			T	E (µg/L)	X (µg/L)	MTBE (µg/L)	NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)					
<b>MW-4</b>	04/20/89	--	--	--	100,000	18,000	14,000	2,000	7,900	--	--
	08/17/89	--	--	--	79,000	7,800	7,600	1,500	6,100	--	--
	11/15/89	--	--	--	73,000	6,300	1,100	820	3,300	--	--
	03/26/90	--	--	--	--	--	--	--	--	--	--
	06/06/90	--	--	--	--	--	--	--	--	--	--
	09/27/90	--	--	--	--	--	--	--	--	--	--
	01/16/91	--	--	--	--	--	--	--	--	--	--
	04/30/91	--	--	--	--	--	--	--	--	--	--
	07/25/91	--	--	--	--	--	--	--	--	--	--
	10/25/91	--	--	--	--	--	--	--	--	--	--
	01/30/92	--	--	--	--	--	--	--	--	--	--
	04/30/92	--	--	--	--	--	--	--	--	--	--
	07/22/92	--	--	--	100,000	21,000	27,000	4,000	21,000	--	--
	10/14/92	--	--	--	--	--	--	--	--	--	--
	01/13/93	--	--	--	--	--	--	--	--	--	--
153.88	04/12/93	8.70	145.20**	0.03	--	--	--	--	--	--	--
	07/10/93	11.60	142.28	Sheen	100,000	20,000	35,000	3,600	19,000	--	--
153.13	10/12/93	14.72	138.55**	0.19	--	--	--	--	--	--	--
	01/10/94	11.92	141.32**	0.15	--	--	--	--	--	--	--
	04/20/94	10.08	143.11**	0.08	--	--	--	--	--	--	--
	07/14/94	12.52	140.63**	0.02	--	--	--	--	--	--	--
	10/18/94	15.40	137.84**	0.14	--	--	--	--	--	--	--
	01/16/95	5.97	147.73**	0.76	--	--	--	--	--	--	--
	04/13/95	5.95	147.18	<0.01/Sheen	94,000	15,000	13,000	2,800	14,000	--	--
	07/20/95	10.20	142.95**	0.02	--	--	--	--	--	--	--
	10/17/95	13.33	139.80	<0.01/Sheen	95,000	14,000	14,000	1,800	9,400	--	--
	01/18/96	8.80	144.33	<0.01/Sheen	340,000	14,000	19,000	6,200	34,000	-- <sup>2</sup>	--
	04/17/96	7.32	145.81	Sheen	67,000	13,000	11,000	2,400	11,000	-- <sup>2</sup>	--
	07/18/96	10.28	142.85	<0.01/Sheen	91,000	8,900	8,900	2,400	9,400	-- <sup>2</sup>	--
	10/18/96	12.72	140.41	<0.01/Sheen	110,000	15,000	13,000	3,700	17,000	--	--
	01/23/97	8.34	144.80**	0.01	130,000	7,300	21,000	1,800	18,000	-- <sup>3</sup>	--
	04/24/97	8.96	144.17	<0.01/Sheen	160,000	15,000	13,000	3,700	17,000	--	--
	07/24/97	12.07	141.06	<0.01/Sheen	130,000	11,000	13,000	2,600	13,000	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-4	10/27-28/97	13.40	139.73	Sheen	200,000	14,000	27,000	4,100	24,000	--	--
(cont)	01/21/98 <sup>8</sup>	5.72	147.41	0.00/Sheen	130,000	11,000	21,000	2,700	16,000	ND <sup>5</sup>	--
	04/15/98 <sup>8</sup>	6.87	146.26	0.00	89,000	13,000	19,000	2,800	15,000	2,600/36 <sup>6</sup>	--
	07/15/98 <sup>8</sup>	9.10	144.03	0.00	120,000	15,000	14,000	3,600	18,000	5ND/ND <sup>5,6</sup>	--
	10/15/98 <sup>8</sup>	12.10	141.03	0.00/Sheen	128,000	18,000	15,900	3,450	17,400	307/ND <sup>5,6</sup>	--
	01/27/99 <sup>8</sup>	8.72	144.41	0.00/Sheen	120,000	15,000	16,000	3,500	18,000	5ND/57 <sup>6</sup>	--
	04/22/99	6.71	146.42	0.00	110,000	14,000	13,000	2,800	15,000	2,800/ND <sup>5,6</sup>	--
	07/22/99 <sup>8</sup>	11.06	142.07	0.00/Sheen	120,000	16,000	14,000	3,100	15,000	5ND/ND <sup>11</sup>	--
	10/20/99 <sup>13</sup>	12.02	141.11	0.00	140,000 <sup>12</sup>	11,000	21,000	5,800	25,000	2,900	--
	01/05/00 <sup>13</sup>	12.36	140.77	0.00	83,800 <sup>12</sup>	4,400	12,800	2,360	14,300	ND <sup>5</sup>	--
	04/06/00	7.77	145.36	0.00/Sheen	200,000 <sup>12</sup>	15,000	20,000	5,700	25,000	ND <sup>5</sup>	--
	07/21/00	10.75	142.38	0.00/Sheen	73,400 <sup>12</sup>	13,900	12,600	2,650	12,400	ND <sup>5</sup>	--
	10/30/00	12.77	140.36	0.00	96,900 <sup>12</sup>	4,230	17,000	3,440	22,400	ND <sup>5</sup>	--
	01/24/01	10.97	142.16	0.00	335,000 <sup>15</sup>	5,880	18,700	6,500	29,500	ND <sup>5</sup>	--
153.13	04/25/01	8.75	144.38	0.00	87,700 <sup>17,18</sup>	14,200	16,200	3,740	17,700	43.3	--
	07/25/01	12.03	141.10	0.00	120,000	9,200	17,000	3,400	19,000	<500	--
	10/24/01 <sup>19</sup>	14.75	138.75**	0.49	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	01/23/02 <sup>21</sup>	7.44	145.86**	0.22	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	04/24/02	8.81	144.36**	0.05	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	07/24/02 <sup>22</sup>	11.53	141.65**	0.06	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	10/18/02 <sup>22</sup>	13.81	139.37**	0.07	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	02/03-04/03 <sup>22</sup>	7.16	146.03**	0.08	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	04/24/03	7.60	145.60**	0.09	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	07/30/03	10.68	142.50**	0.06	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	10/16/03	13.59	139.54	0.00	82,000	6,400	9,800	2,200	20,000	<200/<200 <sup>6</sup>	--
	01/07/04	7.21	145.92	0.00	88,000	9,400	6,400	2,200	16,000	50	--
155.64	05/11/04	9.30	146.34	0.00	51,000	2,400	2,900	1,400	6,600	12	--
	08/05/04	11.85	143.79	0.00/Sheen	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	11/02/04	12.52	143.12	0.00/Sheen	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	02/17/05	--	--	0.00/Sheen	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	05/16/05	9.60	146.04	0.00	30,000 <sup>26</sup>	5,800	2,600	1,400	8,700	13 <sup>6</sup>	--
	8/23-24/2005	10.28	145.36	0.00	47,000 <sup>26</sup>	8,500	1,700	1,000	5,700	56 <sup>6</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-5	11/15/89	--	--	--	ND	ND	ND	ND	ND	--		
	03/26/90	--	--	--	ND	ND	ND	ND	ND	--		
	06/06/90	--	--	--	ND	ND	ND	ND	ND	--		
	09/27/90	--	--	--	ND	ND	ND	ND	ND	--		
	01/16/91	--	--	--	14	1.2	2.3	0.53	2.3	--		
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--		
	07/25/91	--	--	--	ND	ND	ND	ND	ND	--		
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--		
	01/30/92	--	--	--	ND	ND	ND	ND	ND	--		
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--		
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--		
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--		
153.42	01/13/93	--	--	--	ND	ND	ND	ND	ND	--		
	04/12/93	8.25	145.17	0.00	ND	ND	ND	ND	ND	--		
153.01	07/10/93	11.31	142.11	0.00	SAMPLED SEMI-ANNUALLY				--	--		
	10/12/93	14.40	138.61	0.00	ND	ND	ND	ND	ND	--		
	01/10/94	12.07	140.94	0.00	--	--	--	--	--	--		
	04/20/94	10.36	142.65	0.00	ND	ND	ND	ND	ND	1.4		
	07/14/94	13.20	139.81	0.00	--	--	--	--	--	--		
	10/18/94	15.96	137.05	0.00	ND	ND	ND	ND	ND	0.75		
	01/16/95	5.79	147.22	0.00	--	--	--	--	--	--		
	04/13/95	6.18	146.83	0.00	ND	ND	ND	ND	ND	--		
	07/20/95	10.77	142.24	0.00	--	--	--	--	--	--		
	10/17/95	14.18	138.83	0.00	ND	ND	ND	ND	ND	--		
	01/18/96	9.88	143.13	0.00	--	--	--	--	--	--		
	04/17/96	7.50	145.51	0.00	ND	ND	ND	ND	ND	--		
	07/18/96	10.80	142.21	0.00	--	--	--	--	--	--		
	10/18/96	13.85	139.16	0.00	ND	ND	ND	ND	ND	--		
	01/23/97	8.39	144.62	0.00	--	--	--	--	--	--		
	04/24/97	9.01	144.00	0.00	ND	ND	ND	ND	ND	--		
	07/24/97	12.80	140.21	0.00	--	--	--	--	--	--		
	10/27-28/97	14.30	138.71	0.00	ND	ND	ND	ND	ND	--		
	01/21/98	6.00	147.01	0.00	--	--	--	--	--	--		

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-5	04/15/98	6.60	146.41	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
(cont)	07/15/98	9.42	143.59	0.00	--	--	--	--	--	--	--	--
	10/15/98	12.76	140.25	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	01/27/99	8.92	144.09	0.00	--	--	--	--	--	--	--	--
	04/22/99 <sup>9</sup>	6.86	146.15	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	07/22/99	11.52	141.49	0.00	--	--	--	--	--	--	--	--
	10/20/99	12.38	140.63	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/05/00	12.49	140.52	0.00	--	--	--	--	--	--	--	--
	04/06/00	7.95	145.06	0.00	ND	ND	ND	ND	ND	ND	3.2	--
	07/21/00	10.93	142.08	0.00	SAMPLED SEMI-ANNUALLY							--
	10/30/00	13.32	139.69	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/24/01	11.36	141.65	0.00	--	--	--	--	--	--	--	--
	04/25/01	8.78	144.23	0.00	ND	ND	ND	ND	ND	1.06	1.47	--
	07/25/01	12.55	140.46	0.00	--	--	--	--	--	--	--	--
	10/24/01	15.00	138.01	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	01/23/02	7.60	145.41	0.00	--	--	--	--	--	--	--	--
153.01	04/24/02	9.00	144.01	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	07/24/02	12.07	140.94	0.00	--	--	--	--	--	--	--	--
	10/18/02	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--	--
	02/03-04/03	7.47	145.54	0.00	SAMPLED SEMI-ANNUALLY							--
	04/24/03	7.50	145.51	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	10.96	142.05	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	10/16/03	13.45	139.56	0.00	<50	<0.50	0.73	<0.50	1.1	<2.0/<2.0 <sup>6</sup>	--	--
	01/07/04	7.30	145.71	0.00	<50	<0.50	<0.50	<0.50	<1.0	0.8	--	--
156.54	05/11/04	9.22	147.32	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
	08/05/04	12.26	144.28	0.00	<50	<0.50	<0.50	<0.50	<1.0	0.79	--	--
	11/03/04	12.67	143.87	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
	02/17/05	8.20	148.34	0.00	<50	<0.50	<0.50	0.56	2.2	<0.50 <sup>6</sup>	--	--
	05/16/05	7.77	148.77	0.00	<50	4.5	1.7	2.0	12	0.82 <sup>6</sup>	--	--
	8/23-24/2005	10.68	145.86	0.00	<50	<0.50	<0.50	<0.50	<1.0	0.71 <sup>6</sup>	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product		B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)						
MW-6	06/06/90	--	--	--	ND	2.0	6.0	0.64	3.2	--	--
	09/27/90	--	--	--	ND	ND	ND	ND	ND	--	--
	01/16/91	--	--	--	ND	ND	0.18	ND	0.51	--	0.15
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--	--
	07/25/91	--	--	--	ND	ND	ND	ND	ND	--	ND
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	01/30/92	--	--	--	ND	ND	ND	ND	ND	--	ND
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--	--
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--	ND
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--	--
152.88	01/13/93	--	--	--	ND	ND	ND	ND	ND	--	25
	04/12/93	6.98	145.90	0.00	ND	ND	ND	ND	ND	--	--
152.64	07/10/93	10.02	142.86	0.00	SAMPLED SEMI-ANNUALLY		--	--	--	--	--
	10/12/93	13.29	139.35	0.00	ND	ND	ND	ND	ND	--	1.2
	01/10/94	10.84	141.80	0.00	--	--	--	--	--	--	--
	04/20/94	9.72	142.92	0.00	ND	ND	ND	ND	ND	--	0.29
	07/14/94	13.34	139.30	0.00	--	--	--	--	--	--	--
	10/18/94	16.02	136.62	0.00	ND	ND	ND	ND	ND	--	ND
	01/16/95	4.91	147.73	0.00	--	--	--	--	--	--	--
	04/13/95	5.29	147.35	0.00	ND	ND	ND	ND	ND	--	68
	07/20/95	9.79	142.85	0.00	--	--	--	--	--	--	--
	10/17/95	14.25	138.39	0.00	ND	ND	ND	ND	ND	--	0.63
	01/18/96	8.88	143.76	0.00	--	--	--	--	--	--	--
	04/17/96	6.53	146.11	0.00	ND	ND	ND	ND	ND	--	6.8
	07/18/96	9.83	142.81	0.00	SAMPLED SEMI-ANNUALLY		--	--	--	--	--
	10/18/96	14.02	138.62	0.00	ND	ND	ND	ND	ND	--	3.4
	01/23/97	7.62	145.02	0.00	--	--	--	--	--	--	--
	04/24/97	8.50	144.14	0.00	ND	ND	ND	ND	ND	--	0.96
	07/24/97	13.11	139.53	0.00	--	--	--	--	--	--	--
	10/27-28/97	14.38	138.26	0.00	ND	ND	ND	ND	ND	--	ND
	01/21/98	5.26	147.38	0.00	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-6	04/15/98	7.14	145.50	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
(cont)	07/15/98	8.86	143.78	0.00	--	--	--	--	--	--	--
	10/15/98 <sup>7</sup>	13.18	139.46	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
	01/27/99	8.62	144.02	0.00	--	--	--	--	--	--	--
	04/22/99	6.28	146.36	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	4.3
	07/22/99	11.61	141.03	0.00	--	--	--	--	--	--	--
	10/20/99	12.73	139.91	0.00	ND	ND	ND	ND	ND	ND	0.50
	01/05/00	13.07	139.57	0.00	--	--	--	--	--	--	--
	04/06/00	7.47	145.17	0.00	ND	ND	ND	ND	ND	ND	5.3
	07/21/00	11.32	141.32	0.00	--	--	--	--	--	--	--
	10/30/00	13.75	138.89	0.00	ND	ND	ND	ND	ND	ND	ND
	01/24/01	11.75	140.89	0.00	--	--	--	--	--	--	--
152.64	04/25/01	8.63	144.01	0.00	ND	ND	ND	ND	ND	ND	1.5
	07/25/01	12.96	139.68	0.00	--	--	--	--	--	--	--
	10/24/01	15.16	137.48	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/23/02	6.86	145.78	0.00	SAMPLED SEMI-ANNUALLY				--	--	--
	04/24/02	8.38	144.26	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/24/02	12.24	140.40	0.00	--	--	--	--	--	--	--
	10/18/02	14.75	137.89	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.20 <sup>23</sup>
	02/03-04/03	6.83	145.81	0.00	SAMPLED SEMI-ANNUALLY				--	--	--
	04/24/03	7.28	145.36	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	11.02	141.62	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	10/16/03	13.86	138.78	0.00	<50	<0.50	0.71	<0.50	1.1	<2.0/<2.0 <sup>6</sup>	--
	01/07/04	6.82	145.82	0.00	220	<0.50	<0.50	<0.50	<1.0	<0.50	--
156.18	05/11/04	8.93	147.25	0.00	74	1.6	3.6	2.7	12	<0.50	--
	08/05/04	12.93	143.25	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/03/04	13.61	142.57	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	7.91	148.27	0.00	<50	<0.50	<0.50	<0.50	1.0	<0.50 <sup>6</sup>	--
	05/16/05	6.80	149.38	0.00	<50	0.53	<0.50	<0.50	2.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>10.79</b>	<b>145.39</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	<b>--</b>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-7	06/06/90	--	--	--	ND	0.3	3.6	ND	0.52	--	--
	09/27/90	--	--	--	ND	ND	ND	ND	ND	--	--
	01/16/91	--	--	--	ND	0.59	0.42	ND	0.3	--	0.34
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--	--
	07/25/91	--	--	--	ND	ND	ND	ND	ND	--	ND
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	01/30/92	--	--	--	ND	ND	ND	ND	ND	--	ND
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--	--
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--	ND
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--	--
152.51	01/13/93	--	--	--	ND	ND	ND	ND	ND	--	25
	04/12/93	7.55	144.96	0.00	ND	ND	ND	ND	ND	--	--
152.23	07/10/93	10.47	142.04	0.00	SAMPLED SEMI-ANNUALLY				--	--	--
	10/12/93	13.72	138.51	0.00	ND	ND	ND	ND	ND	--	2.8
	01/10/94	11.22	141.01	0.00	--	--	--	--	--	--	--
	04/20/94	10.08	142.15	0.00	ND	ND	ND	ND	0.58	--	0.27
	07/14/94	12.90	139.33	0.00	--	--	--	--	--	--	--
	10/18/94	15.56	136.67	0.00	ND	ND	ND	ND	0.99	--	ND
	01/16/95	5.31	146.92	0.00	--	--	--	--	--	--	--
	04/13/95	5.92	146.31	0.00	ND	0.86	ND	ND	ND	--	ND
	07/20/95	10.40	141.83	0.00	--	--	--	--	--	--	--
	10/17/95	13.74	138.49	0.00	ND	ND	ND	ND	ND	-- <sup>1</sup>	ND
	01/18/96	9.46	142.77	0.00	--	--	--	--	--	--	--
	04/17/96	7.08	145.15	0.00	ND	ND	ND	ND	ND	--	0.42
	07/18/96	10.03	142.20	0.00	--	--	--	--	--	--	--
	10/18/96	13.31	138.92	0.00	ND	ND	ND	ND	ND	--	0.81
	01/23/97	8.01	144.22	0.00	--	--	--	--	--	--	--
	04/24/97	8.95	143.28	0.00	ND	ND	ND	ND	ND	--	ND
	07/24/97	12.40	139.83	0.00	--	--	--	--	--	--	--
	10/27-28/97	13.87	138.36	0.00	ND	ND	ND	ND	ND	--	ND
	01/21/98	5.40	146.83	0.00	--	--	--	--	--	--	--

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**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
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WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-7	04/15/98	7.18	145.05	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
(cont)	07/15/98	9.01	143.22	0.00	--	--	--	--	--	--	--
	10/15/98 <sup>7</sup>	12.51	139.72	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
	01/27/99	8.67	143.56	0.00	--	--	--	--	--	--	--
	04/22/99	6.78	145.45	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	0.23
	07/22/99	11.38	140.85	0.00	--	--	--	--	--	--	--
	10/20/99	12.62	139.61	0.00	ND	ND	ND	ND	ND	ND	0.11
	01/05/00	12.85	139.38	0.00	--	--	--	--	--	--	--
	04/06/00	7.87	144.36	0.00	ND	ND	ND	ND	ND	ND	ND
	07/21/00	11.10	141.13	0.00	SAMPLED SEMI-ANNUALLY						
	10/30/00	13.61	138.62	0.00	ND	ND	ND	ND	ND	ND	ND
	01/24/01	11.23	141.00	0.00	--	--	--	--	--	--	--
	04/25/01	8.86	143.37	0.00	95.7 <sup>16</sup>	ND	ND	ND	ND	ND	ND
	07/25/01	12.44	139.79	0.00	--	--	--	--	--	--	--
	10/24/01	14.68	137.55	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<1.0
	01/23/02	7.33	144.90	0.00	--	--	--	--	--	--	--
152.23	04/24/02	8.76	143.47	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.470
	07/24/02	11.82	140.41	0.00	SAMPLED SEMI-ANNUALLY						
	10/18/02	14.23	138.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.20 <sup>23</sup>
	02/03-04/03	7.34	144.89	0.00	SAMPLED SEMI-ANNUALLY						
	04/24/03	7.77	144.46	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	10.81	141.42	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	10/16/03	13.69	138.54	0.00	<50	<0.50	0.69	<0.50	1.0	<2.0/<2.0 <sup>6</sup>	--
	01/07/04	7.37	144.86	0.00	220	<0.50	<0.50	<0.50	<1.0	<0.50	--
155.78	05/11/04	9.20	146.58	0.00	210	3.9	4.8	3.4	13	<0.50	--
	08/05/04	12.36	143.42	0.00	79 <sup>25</sup>	0.91	<0.50	<0.50	<1.0	<0.50	--
	11/03/04	13.00	142.78	0.00	<50	0.70	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	8.02	147.76	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	7.57	148.21	0.00	76 <sup>26</sup>	0.62	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	8/23-24/2005	10.70	145.08	0.00	230 <sup>26</sup>	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-8	11/15/89	--	--	--	30,000	3,300	1,900	490	2,000	--	--
	03/26/90	--	--	--	52,000	6,500	5,400	1,400	4,500	--	--
	06/06/90	--	--	--	45,000	6,200	4,100	1,100	3,600	--	--
	09/27/90	--	--	--	28,000	3,800	1,500	720	1,800	--	--
	01/16/91	--	--	--	ND	ND	ND	ND	ND	--	--
	04/30/91	--	--	--	--	--	--	--	--	--	--
	07/25/91	--	--	--	32,000	4,800	4,200	1,400	3,900	--	--
	10/25/91	--	--	--	51,000	5,400	3,000	1,100	3,000	--	--
	01/30/92	--	--	--	29,000	2,800	2,200	1,100	2,800	--	--
	04/30/92	--	--	--	57,000	5,000	6,100	1,700	7,100	--	--
	07/22/92	--	--	--	42,000	4,800	4,300	1,300	3,700	--	--
	10/14/92	--	--	--	4,800	580	230	130	190	--	--
	01/13/93	--	--	--	26,000	1,600	1,600	830	2,000	--	--
153.44	04/12/93	8.58	144.86	0.00	41,000	4,200	3,200	1,200	2,800	--	--
	07/10/93	11.66	141.78	0.00	38,000	2,000	4,200	1,600	4,400	--	--
153.13	10/12/93	14.72	138.41	<0.01	--	--	--	--	--	--	--
	01/10/94	12.11	141.02	Sheen	30,000	2,000	2,100	1,100	2,600	--	--
	04/20/94	10.37	142.76	0.00	43,000	3,700	4,400	1,400	3,700	--	--
	07/14/94	12.72	140.41	0.00	24,000	4,900	3,800	1,300	3,000	--	--
	10/18/94	15.36	137.77	0.00	46,000	3,100	2,900	1,300	2,700	--	--
	01/16/95	6.17	146.96	0.00	41,000	4,000	2,000	1,000	1,800	--	--
	04/13/95	6.97	146.16	0.00	50,000	7,200	7,100	1,700	5,500	--	--
	07/20/95	10.78	142.35	Sheen	33,000	4,300	4,600	1,300	3,800	--	--
	10/17/95	13.61	139.52	Sheen	110,000	2,500	2,800	1,100	3,200	-- <sup>1</sup>	--
	01/18/96	9.80	143.33	0.00	26,000	3,100	2,100	1,100	2,700	-- <sup>2</sup>	--
	04/17/96	7.98	145.15	0.00	40,000	5,600	5,600	1,400	4,300	-- <sup>2</sup>	--
	07/18/96	10.66	142.47	0.00	47,000	3,000	2,800	1,600	3,900	-- <sup>2</sup>	--
	10/18/96	13.18	139.95	Sheen	45,000	3,000	2,600	1,100	2,800	--	--
	01/23/97	8.27	144.86	0.00	110,000	7,900	21,000	2,000	18,000	-- <sup>3</sup>	--
	04/24/97	9.49	143.64	Sheen	33,000	2,700	2,500	1,100	2,500	--	--
	07/24/97	12.32	140.81	Sheen	40,000	2,100	3,000	1,100	2,800	--	--
	10/27-28/97	13.68	139.45	Sheen	20,000	1,000	1,000	660	1,900	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup>	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	(µg/L)	
MW-8	01/21/98	6.32	146.81	0.00	13,000	840	730	70	1,300	ND <sup>5</sup>	--	
(cont)	04/15/98	7.59	145.54	0.00	40,000	4,500	4,800	1,500	4,200	1,400/ND <sup>6</sup>	--	
	07/15/98	9.63	143.50	0.00	36,000	4,500	4,400	1,500	4,200	6,200/ND <sup>6</sup>	--	
	10/15/98	12.35	140.78	0.00	32,600	2,880	2,770	1,120	2,890	ND/ND <sup>5,6</sup>	--	
	01/27/99	9.02	144.11	0.00	31,000	2,500	2,800	1,300	3,500	<sup>5</sup> ND/ND <sup>6</sup>	--	
	04/22/99	7.32	145.81	0.00	43,000	3,600	4,800	1,700	4,800	<sup>5</sup> ND/71 <sup>6</sup>	--	
	07/22/99	11.50	141.63	0.00	45,000	4,500	4,800	1,500	4,800	<sup>5</sup> ND/ND <sup>11</sup>	--	
	10/20/99	12.31	140.82	0.00	21,000 <sup>12</sup>	780	ND <sup>5</sup>	570	1,900	ND <sup>5</sup>	--	
	01/05/00	12.42	140.71	0.00	12,700 <sup>12</sup>	737	674	488	1,010	ND <sup>5</sup>	--	
	04/06/00	8.24	144.89	0.00/Sheen	37,000 <sup>12</sup>	4,400	4,700	1,500	4,000	1,700	--	
	07/21/00	11.16	141.97	0.00/Sheen	22,200 <sup>12</sup>	3,110	1,590	862	2,070	1,330	--	
	10/30/00	12.88	140.25	0.00	13,200 <sup>12</sup>	693	815	632	1,300	ND <sup>5</sup>	--	
	01/24/01	11.32	141.81	0.00	27,300 <sup>15</sup>	3,060	1,570	972	2,270	472	--	
	04/25/01	9.24	143.89	0.00	31,900 <sup>17</sup>	2,390	2,960	1,520	3,550	20.0	--	
	07/25/01	12.30	140.83	0.00	32,000	2,900	2,200	930	2,600	<250	--	
	10/24/01	14.48	138.65	0.00	20,000	2,000	860	830	1,500	1,800	--	
	01/23/02 <sup>20</sup>	7.91	145.22	0.00	--	--	--	--	--	--	--	
	01/26/02	7.70	145.43	0.00	25,000	2,100	1,900	1,100	2,300	<250	--	
	04/24/02	9.30	143.83	0.00	32,000	2,300	2,100	970	2,400	57	--	
	07/24/02	11.86	141.27	0.00	24,000	950	740	880	2,000	90	--	
	10/18/02	14.02	139.11	0.00	30,000	2,100	2,400	1,200	3,600	<120	--	
153.13	02/03-04/03	7.75	145.38	0.00	15,000	1,800	880	630	720	<50	--	
	04/24/03	8.33	144.80	0.00	15,000	2,500	2,300	970	2,000	190/<40 <sup>6</sup>	--	
	07/30/03	11.08	142.05	0.00	7,800	540	310	250	520	320/<10 <sup>6</sup>	--	
	10/16/03	13.42	139.71	0.00	9,800	800	430	370	710	160/<20 <sup>6</sup>	--	
	01/07/04	7.80	145.33	0.00	10,000	950	220	170	880	<2.5	--	
155.62	05/11/04	10.55	145.07	0.00	2,100	120	27	64	72	<2.5	--	
	08/05/04	12.55	143.07	0.00	14,000 <sup>25</sup>	870	180	390	390	<0.50	--	
	11/03/04	12.70	142.92	0.00	12,000 <sup>25</sup>	740	200	500	500	<0.50	--	
	02/17/05	8.65	146.97	0.00	7,000 <sup>26</sup>	410	230	220	520	<5.0 <sup>6</sup>	--	
	05/16/05	7.44	148.18	0.00	12,000	950	310	520	990	<10.0 <sup>6</sup>	--	
	8/23-24/2005	11.61	144.01	0.00	16,000 <sup>26</sup>	1,300	100	290	230	<0.50 <sup>6</sup>	--	

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product					NITRATES AS NO <sup>3</sup>		
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	(µg/L)
MW-9	11/15/89	--	--	--	ND	ND	ND	ND	ND	--	--
	03/26/90	--	--	--	44	0.92	0.5	1.3	ND	--	--
	06/06/90	--	--	--	ND	ND	0.5	ND	ND	--	--
	09/27/90	--	--	--	ND	ND	0.62	ND	ND	--	--
	01/16/91	--	--	--	ND	ND	ND	ND	0.3	--	--
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--	--
	07/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	01/30/92	INACCESSIBLE		--	--	--	--	--	--	--	--
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--	--
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--	--
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--	--
	01/13/93	--	--	--	ND	ND	ND	ND	ND	--	--
152.99	04/12/93	7.67	145.32	0.00	ND	ND	ND	ND	ND	--	--
	07/10/93	10.82	142.17	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
152.67	10/12/93	14.00	138.67	0.00	ND	ND	ND	ND	ND	--	--
	01/10/94	10.22	142.45	0.00	--	--	--	--	--	--	--
	04/20/94	8.70	143.97	0.00	ND	ND	ND	ND	ND	--	--
	07/14/94	10.38	142.29	0.00	--	--	--	--	--	--	--
	10/18/94	12.76	139.91	0.00	ND	ND	ND	ND	ND	--	--
	01/16/95	6.11	146.56	0.00	--	--	--	--	--	--	--
	04/13/95	6.88	145.79	0.00	ND	ND	ND	ND	ND	--	--
	07/20/95	8.92	143.75	0.00	--	--	--	--	--	--	--
	10/17/95	11.11	141.56	0.00	ND	ND	ND	ND	ND	--	--
	01/18/96	8.10	144.57	0.00	--	--	--	--	--	--	--
	04/17/96	7.27	145.40	0.00	ND	ND	ND	ND	ND	--	--
	07/18/96	8.88	143.79	0.00	--	--	--	--	--	--	--
	10/18/96	10.65	142.02	0.00	ND	ND	ND	ND	ND	--	--
	01/23/97	7.83	144.84	0.00	--	--	--	--	--	--	--
	04/24/97	8.10	144.57	0.00	ND	ND	ND	ND	ND	--	--
	07/24/97	9.78	142.89	0.00	--	--	--	--	--	--	--
	10/27-28/97	11.11	141.56	0.00	ND	ND	ND	ND	ND	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-9	01/21/98	5.12	147.55	0.00	--	--	--	--	--	--	--	--
(cont)	04/15/98	7.08	145.59	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	07/15/98	7.85	144.82	0.00	--	--	--	--	--	--	--	--
	10/15/98	9.98	142.69	0.00	ND	ND	ND	ND	ND	0.548	ND/ND <sup>6</sup>	--
	01/27/99	5.61	147.06	0.00	SAMPLED SEMI-ANNUALLY							--
	04/22/99	7.21	145.46	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	07/22/99	9.58	143.09	0.00	--	--	--	--	--	--	--	--
	10/20/99	9.85	142.82	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/05/00	11.10	141.57	0.00	--	--	--	--	--	--	--	--
	04/06/00	7.35	145.32	0.00	ND	ND	ND	ND	ND	ND	ND	--
	07/21/00	10.20	142.47	0.00	--	--	--	--	--	--	--	--
	10/30/00	11.73	140.94	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/24/01	10.30	142.37	0.00	--	--	--	--	--	--	--	--
	04/25/01	8.27	144.40	0.00	ND	ND	ND	ND	ND	0.598	ND	--
	07/25/01	11.55	141.12	0.00	--	--	--	--	--	--	--	--
	10/24/01	12.05	140.62	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/23/02	6.22	146.45	0.00	SAMPLED SEMI-ANNUALLY							--
	04/24/02	8.26	144.41	0.00	<50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<2.5
	07/24/02	9.74	142.93	0.00	--	--	--	--	--	--	--	--
	10/18/02	11.77	140.90	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5
	02/03-04/03	8.26	144.41	0.00	SAMPLED SEMI-ANNUALLY							--
	04/24/03	7.48	145.19	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	INACCESSIBLE - PAVED OVER			--	--	--	--	--	--	--	--
153.01	10/16/03	11.80	141.21	0.00	<50	<0.50	0.73	<0.50	1.2	<2.0/<2.0 <sup>6</sup>	--	--
	01/07/04	7.22	145.79	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--
155.46	05/11/04	9.00	146.46	0.00	<50	<0.50	0.60	<0.50	<1.0	<0.50	<0.50	--
	08/05/04	10.60	144.86	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	11.10	144.36	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	7.68	147.78	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	7.46	148.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	8/23-24/2005	9.65	145.81	0.00	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product					NITRATES		
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	AS NO <sup>3</sup> (µg/L)
MW-10	11/15/89	--	--	--	ND	ND	ND	ND	ND	--	--
	03/26/90	--	--	--	ND	ND	ND	ND	ND	--	--
	06/06/90	--	--	--	ND	ND	ND	ND	ND	--	--
	09/27/90	--	--	--	ND	ND	ND	ND	ND	--	--
	01/16/91	--	--	--	ND	ND	ND	ND	ND	--	--
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--	--
	07/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	01/30/92	INACCESSIBLE		--	--	--	--	--	--	--	--
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--	--
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--	--
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--	--
	01/13/93	--	--	--	ND	ND	ND	ND	ND	--	--
152.71	04/12/93	7.22	145.49	0.00	ND	ND	ND	ND	ND	--	--
	07/10/93	10.26	142.45	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
152.43	10/12/93	13.48	138.95	0.00	ND	ND	ND	ND	ND	--	--
	01/10/94	9.98	142.45	0.00	--	--	--	--	--	--	--
	04/20/94	8.48	143.95	0.00	ND	ND	ND	ND	ND	--	--
	07/14/94	10.15	142.28	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
	10/18/94	12.50	139.93	0.00	ND	ND	ND	ND	ND	--	--
	01/16/95	5.90	146.53	0.00	--	--	--	--	--	--	--
	04/13/95	6.67	145.76	0.00	ND	ND	ND	ND	ND	--	--
	07/20/95	8.70	143.73	0.00	--	--	--	--	--	--	--
	10/17/95	10.88	141.55	0.00	ND	ND	ND	ND	ND	--	--
	01/18/96	7.88	144.55	0.00	--	--	--	--	--	--	--
	04/17/96	7.05	145.38	0.00	ND	ND	ND	ND	ND	--	--
	07/18/96	8.67	143.76	0.00	--	--	--	--	--	--	--
	10/18/96	10.41	142.02	0.00	ND	ND	ND	ND	ND	--	--
	01/23/97	7.05	145.38	0.00	--	--	--	--	--	--	--
	04/24/97	7.88	144.55	0.00	ND	ND	ND	ND	ND	--	--
	07/24/97	9.56	142.87	0.00	--	--	--	--	--	--	--
	10/27-28/97	10.88	141.55	0.00	ND	ND	ND	ND	ND	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)		
MW-10	01/21/98	4.81	147.62	0.00	--	--	--	--	--	--		
(cont)	04/15/98	6.70	145.73	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	07/15/98	7.67	144.76	0.00	--	--	--	--	--	--	--	--
	10/15/98	9.76	142.67	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	01/27/99	5.46	146.97	0.00	--	--	--	--	--	--	--	--
	04/22/99	7.02	145.41	0.00	ND	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	--
	07/22/99	9.37	143.06	0.00	--	--	--	--	--	--	--	--
	10/20/99	9.67	142.76	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/05/00	9.88	142.55	0.00	--	--	--	--	--	--	--	--
	04/06/00	7.15	145.28	0.00	ND	ND	ND	ND	ND	ND	ND	--
	07/21/00	9.98	142.45	0.00	--	--	--	--	--	--	--	--
	10/30/00	10.65	141.78	0.00	ND	ND	ND	ND	ND	ND	ND	--
	01/24/01	10.11	142.32	0.00	--	--	--	--	--	--	--	--
	04/25/01	8.06	144.37	0.00	ND	ND	ND	ND	ND	ND	ND	--
	07/25/01	11.36	141.07	0.00	--	--	--	--	--	--	--	--
	10/24/01	11.91	140.52	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	01/23/02	6.12	146.31	0.00	SAMPLED SEMI-ANNUALLY				--	--	--	--
	04/24/02	8.06	144.37	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	07/24/02	9.97	142.46	0.00	--	--	--	--	--	--	--	--
	10/18/02	11.50	140.93	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	02/03-04/03	8.11	144.32	0.00	SAMPLED SEMI-ANNUALLY				--	--	--	--
	04/24/03	7.30	145.13	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	INACCESSIBLE - PAVED OVER			--	--	--	--	--	--	--	--
152.64	10/16/03	10.88	141.76	0.00	<50	<0.50	0.76	<0.50	1.2	<2.0/<2.0 <sup>6</sup>	--	--
	01/07/04	6.95	145.69	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
155.03	05/11/04	8.60	146.43	0.00	<50	0.61	1.1	0.66	2.6	<0.50	--	--
	08/05/04	10.19	144.84	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
	11/02/04	10.65	144.38	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
	02/17/05	8.02	147.01	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50 <sup>6</sup>	--
	05/16/05	7.09	147.94	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50 <sup>6</sup>	--
	8/23-24/2005	9.26	145.77	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50 <sup>6</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-11	06/06/90	--	--	--	ND	ND	ND	ND	ND	--	--
	09/27/90	--	--	--	ND	ND	ND	ND	ND	--	--
	01/16/91	--	--	--	ND	ND	ND	ND	ND	--	0.13
	04/30/91	--	--	--	ND	ND	ND	ND	ND	--	--
	07/25/91	--	--	--	ND	0.39	ND	0.52	3.1	--	ND
	10/25/91	--	--	--	ND	ND	ND	ND	ND	--	--
	01/30/92	--	--	--	ND	ND	ND	ND	ND	--	ND
	04/30/92	--	--	--	ND	ND	ND	ND	ND	--	--
	07/22/92	--	--	--	ND	ND	ND	ND	ND	--	13
	10/14/92	--	--	--	ND	ND	ND	ND	ND	--	--
151.99	01/13/93	--	--	--	ND	ND	ND	ND	ND	--	25
	04/12/93	5.98	146.01	0.00	ND	ND	ND	ND	ND	--	--
151.37	07/10/93	9.64	142.35	0.00	SAMPLED SEMI-ANNUALLY				--	--	--
	10/12/93	12.51	138.86	0.00	ND	ND	ND	ND	ND	--	0.49
	01/10/94	10.11	141.26	0.00	--	--	--	--	--	--	--
	04/20/94	8.67	142.70	0.00	ND	ND	ND	ND	ND	--	0.28
	07/14/94	11.94	139.43	0.00	--	--	--	--	--	--	--
	10/18/94	14.58	136.79	0.00	ND	ND	ND	ND	1.4	--	ND
	01/16/95	3.80	147.57	0.00	--	--	--	--	--	--	--
	04/13/95	4.23	147.14	0.00	ND	ND	ND	ND	ND	--	ND
	07/20/95	8.72	142.65	0.00	--	--	--	--	--	--	--
	10/17/95	12.77	138.60	0.00	ND	ND	ND	ND	ND	-- <sup>1</sup>	ND
	01/18/96	7.10	144.27	0.00	--	--	--	--	--	--	--
	04/17/96	5.28	146.09	0.00	ND	ND	ND	ND	ND	--	0.47
	07/18/96	8.95	142.42	0.00	--	--	--	--	--	--	--
	10/18/96	12.37	139.00	0.00	ND	ND	ND	ND	ND	--	2.4
	01/23/97	7.76	143.61	0.00	--	--	--	--	--	--	--
	04/24/97	6.88	144.49	0.00	ND	ND	ND	ND	ND	--	ND
	07/24/97	11.44	139.93	0.00	--	--	--	--	--	--	--
	10/27-28/97	12.90	138.47	0.00	ND	ND	ND	ND	ND	--	ND
	01/21/98	4.06	147.31	0.00	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							NITRATES AS NO <sup>3</sup> (µg/L)
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
MW-11	04/15/98	7.26	144.11	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
(cont)	07/15/98	7.06	144.31	0.00	SAMPLED SEMI-ANNUALLY	--	--	--	--	--	--
	10/15/98 <sup>7</sup>	11.54	139.83	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
	01/27/99	6.87	144.50	0.00	--	--	--	--	--	--	--
	04/22/99	5.13	146.24	0.00	ND	ND	ND	ND	ND	ND/ND <sup>6</sup>	ND
	07/22/99	10.56	140.81	0.00	--	--	--	--	--	--	--
	10/20/99	11.36	140.01	0.00	ND	ND	ND	ND	ND	ND	ND
	01/05/00	11.60	139.77	0.00	--	--	--	--	--	--	--
	04/06/00	5.93	145.44	0.00	ND	ND	ND	ND	ND	ND	ND
	07/21/00	10.30	141.07	0.00	--	--	--	--	--	--	--
	10/30/00	11.94	139.43	0.00	ND	ND	ND	ND	ND	ND	ND
	01/24/01	10.42	140.95	0.00	--	--	--	--	--	--	--
	04/25/01	8.29	143.08	0.00	ND	ND	ND	ND	ND	ND	ND
	07/25/01	11.50	139.87	0.00	--	--	--	--	--	--	--
151.37	10/24/01	13.70	137.67	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<1.0
	01/23/02	5.49	145.88	0.00	--	--	--	--	--	--	--
	04/24/02	6.74	144.63	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.200
	07/24/02	11.07	140.30	0.00	--	--	--	--	--	--	--
	10/18/02	13.24	138.13	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.20 <sup>23</sup>
	02/03-04/03	5.47	145.90	0.00	SAMPLED SEMI-ANNUALLY	--	--	--	--	--	--
	04/24/03	6.00	145.37	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	07/30/03	9.67	141.70	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 <sup>6</sup>	--
	10/16/03	12.67	138.70	0.00	<50	<0.50	0.64	<0.50	0.97	<2.0/<2.0 <sup>6</sup>	--
	01/07/04	5.43	145.94	0.00	930	2.8	<0.50	<0.50	1.9	<0.50	--
154.86	05/11/04	7.30	147.56	0.00	210	5.0	7.1	5.3	18	<0.50	--
	08/05/04	11.40	143.46	0.00	<50	0.78	<0.50	<0.50	<0.50	<0.50	--
	11/03/04	11.89	142.97	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
	02/17/05	6.48	148.38	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	5.43	149.43	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	8/23-24/2005	9.96	144.90	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--

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**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product		B ( $\mu\text{g}/\text{L}$ )	T ( $\mu\text{g}/\text{L}$ )	E ( $\mu\text{g}/\text{L}$ )	X ( $\mu\text{g}/\text{L}$ )	MTBE ( $\mu\text{g}/\text{L}$ )	NITRATES AS NO <sup>3</sup> ( $\mu\text{g}/\text{L}$ )
				Thickness (ft.)	TPHg ( $\mu\text{g}/\text{L}$ )						
<b>MW-12A</b>											
156.61	05/11/04	11.36	145.25	0.00	<50	2.4	3.1	1.3	5.2	<0.50	--
	08/05/04	13.80	142.81	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	14.28	142.33	0.00	<50	0.70	0.71	<0.50	<1.0	<0.50	--
	02/17/05	10.16	146.45	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	9.01	147.60	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>12.45</b>	<b>144.16</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--
<b>MW-12B</b>											
156.54	05/11/04	12.43	144.11	0.00	<50	0.77	1.2	<0.50	2.0	<0.50	--
	08/05/04	14.91	141.63	0.00	<50	0.69	0.63	<0.50	<1.0	<0.50	--
	11/02/04	15.29	141.25	0.00	<50	0.65	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	11.20	145.34	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	10.23	146.31	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>13.58</b>	<b>142.96</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--
<b>MW-13A</b>											
155.48	05/11/04	10.70	144.78	0.00	<50	0.71	0.85	<0.50	1.9	<0.50	--
	08/05/04	13.11	142.37	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	13.48	142.00	0.00	<50	0.65	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	9.46	146.02	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	8.58	146.90	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>11.76</b>	<b>143.72</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--
<b>MW-13B</b>											
155.49	05/11/04	11.20	144.29	0.00	<50	1.1	2.9	1.5	6.1	<0.50	--
	08/05/04	13.61	141.88	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	13.92	141.57	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	9.97	145.52	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	8.78	146.71	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>15.90</b>	<b>139.59</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product		B ( $\mu\text{g}/\text{L}$ )	T ( $\mu\text{g}/\text{L}$ )	E ( $\mu\text{g}/\text{L}$ )	X ( $\mu\text{g}/\text{L}$ )	MTBE ( $\mu\text{g}/\text{L}$ )	NITRATES AS NO <sup>3</sup> ( $\mu\text{g}/\text{L}$ )
				Thickness (ft.)	TPHg ( $\mu\text{g}/\text{L}$ )						
<b>MW-14A</b>											
157.14	05/11/04	12.16	144.98	0.00	<50	0.98	1.7	1.3	5.1	10	--
	08/05/04	14.75	142.39	0.00	<50	<0.50	<0.50	<0.50	<1.0	21	--
	11/03/04	15.08	142.06	0.00	<50	<0.50	<0.50	<0.50	<1.0	22	--
	02/17/05	10.93	146.21	0.00	<50	<0.50	<0.50	<0.50	<1.0	32 <sup>6</sup>	--
	05/16/05	12.93	144.21	0.00	<50	<0.50	<0.50	<0.50	<1.0	16 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>13.26</b>	<b>143.88</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>20<sup>6</sup></b>	--
<b>MW-14B</b>											
157.05	05/11/04	12.85	144.20	0.00	<50	0.81	0.90	0.55	2.1	<0.50	--
	08/05/04	15.25	141.80	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/03/04	15.62	141.43	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	11.51	145.54	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	10.68	146.37	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>13.93</b>	<b>143.12</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--
<b>MW-15</b>											
154.92	05/11/04	7.65	147.27	--	170	1.2	<0.50	<0.50	1.1	<0.50	--
	08/05/04	11.55	143.37	--	<50	0.86	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	12.00	142.92	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	02/17/05	6.79	148.13	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	05/16/05	5.72	149.20	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50 <sup>6</sup>	--
	<b>8/23-24/2005</b>	<b>10.08</b>	<b>144.84</b>	<b>--</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50<sup>6</sup></b>	--

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**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						NITRATES AS NO <sup>3</sup> (µg/L)	
				Thickness (ft.)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	
<b>Trip Blank</b>											
TB-LB	01/21/98	--	--	--	ND	ND	ND	ND	ND	ND	ND
	04/15/98	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/15/98	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/15/98	--	--	--	ND	ND	ND	ND	ND	2.79	--
	01/27/99	--	--	--	ND	ND	ND	ND	ND	ND	--
	04/22/99	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/22/99	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/20/99	--	--	--	ND	ND	ND	ND	ND	ND	--
	01/05/00	--	--	--	ND	ND	ND	ND	ND	5.68	--
	04/06/00	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/21/00	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/30/00	--	--	--	ND	ND	ND	ND	ND	ND	--
	01/24/01	--	--	--	ND	ND	ND	ND	ND	ND	--
	04/25/01	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/25/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	10/24/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	01/23/02 <sup>20</sup>	--	--	--	--	--	--	--	--	--	--
	01/26/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	04/24/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
QA	07/24/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	10/18/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	02/03-04/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	04/24/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0	--
	07/30/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0	--
	10/16/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0	--
	01/07/04	--	--	--	NA	NA	NA	NA	NA	NA	--
	08/05/04	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--
	11/02/04	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/17/05	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	05/16/05	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	8/23-24/2005	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--

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1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product		B ( $\mu\text{g}/\text{L}$ )	T ( $\mu\text{g}/\text{L}$ )	E ( $\mu\text{g}/\text{L}$ )	X ( $\mu\text{g}/\text{L}$ )	MTBE ( $\mu\text{g}/\text{L}$ )	NITRATES AS NO <sup>3</sup> ( $\mu\text{g}/\text{L}$ )
				Thickness (ft.)	TPHg ( $\mu\text{g}/\text{L}$ )						

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to January 7, 2004, were compiled from reports prepared by Gettler-Ryan, Inc.

TOC = Top of Casing

B = Benzene

( $\mu\text{g}/\text{L}$ ) = Micrograms per Liter

(ft.) = Feet

T = Toluene

QA = Quality Assurance/Trip Blank

DTW = Depth to Water

E = Ethylbenzene

ND = Not Detected

GWE = Groundwater Elevation

X = Xylenes

-- = Not Measured/Not Analyzed

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

TPHg = Total Petroleum Hydrocarbons as Gasoline

\* TOC elevations for MW-9 & MW-10 were performed on August 27, 2003, by Virgil Chavez Land Surveying, using the following City Benchmark: being a brass disk in a monument well on the centerline of Santa Rosa Avenue, 210 feet south of Flower Avenue, (Benchmark Elevation = 147.895 feet, NGVD 29). TOC elevations are relative to

msl, per the City of Santa Rosa Benchmark C-175, (Elevation = 157.23 feet, msl). Prior to October 12, 1993, the DTW measurements were taken from top of well cover.

\*\* GWE corrected due to the presence of free product; correction factor: [(TOC - DTW) + (Product Thickness x 0.75)].

1 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.

2 Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.

3 MTBE was ND. Detection limit was 1,000 ppb.

4 MTBE was ND. Detection limit was 500 ppb.

5 Detection limit raised. Refer to analytical reports.

6 MTBE by EPA Method 8260.

7 Nitrate/Nitrite was ND.

8 Skimmer present in well.

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

				Product						MTBE	NITRATES
WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Thickness (ft.)	TPHg ( $\mu\text{g}/\text{L}$ )	B ( $\mu\text{g}/\text{L}$ )	T ( $\mu\text{g}/\text{L}$ )	E ( $\mu\text{g}/\text{L}$ )	X ( $\mu\text{g}/\text{L}$ )	( $\mu\text{g}/\text{L}$ )	AS NO <sup>3</sup> ( $\mu\text{g}/\text{L}$ )
9	Laboratory indicates sample was re-run past hold time (May 10, 1999).										
10	Laboratory report indicates gasoline and unidentified hydrocarbons <C6.										
11	MTBE by EPA Method 8260 analyzed past hold time (August 11, 1999). Sample was originally analyzed within holding time on (August 5, 1999), however the quality control standard showed over-recovery. Sample contained a non-target compound which elutes in the same window as MTBE.										
12	Laboratory report indicates gasoline C6-C12.										
13	Skimmer not in well. Refer to field sheets.										
14	Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.										
15	Laboratory report indicates weathered gasoline C6-C12.										
16	Laboratory report indicates gas range.										
17	Laboratory report indicates gas pattern.										
18	Laboratory report indicates early peaks.										
19	Bailed 0.35 gallons of water + product.										
20	Samples were misplaced at the laboratory; analysis was not performed.										
21	Bailed 0.25 gallons of water + product.										
22	Bailed 0.50 gallons of water + product.										
23	Laboratory report indicates this sample was analyzed beyond the EPA recommended holding time.										
24	Laboratory report indicates discrete peak @ MTBE.										
25	Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.										
26	Weathered gasoline.										

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to January 7, 2004, were compiled from reports prepared by Gettler-Ryan, Inc.

TOC	= Top of Casing	B	= Benzene	µg/L	= Micrograms per Liter
ft.	= Feet	T	= Toluene	QA	= Quality Assurance/Trip Blank
DTW	= Depth to Water	E	= Ethylbenzene	ND	= Not Detected
GWE	= Groundwater Elevation	X	= Xylenes	--	= Not Measured/Not Analyzed
msl	= Mean sea level	MTBE	= Methyl tertiary butyl ether		
TPHg	= Total Petroleum Hydrocarbons as Gasoline				

- \* Benchmark: being a brass disk in NGVD 29). TOC elevations are relative to were taken from top of well cover.
- \*\* GWE corrected due to the presence of free product; correction factor: [(TOC - DTW) + (Product Thickness x 0.75)].
- 1 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.
- 2 collected from this well.
- 3 MTBE was ND. Detection limit was 1,000 ppb.
- 4 MTBE was ND. Detection limit was 500 ppb.
- 5 Detection limit raised. Refer to analytical reports.
- 6 MTBE by EPA Method 8260.
- 7 Nitrate/Nitrite was ND.
- 8 Skimmer present in well.
- 9 Laboratory indicates sample was re-run past hold time (May 10, 1999).
- 10 Laboratory report indicates gasoline and unidentified hydrocarbons <C6.
- 11 MTBE by EPA Method 8260 analyzed past hold time (August 11, 1999). Sample was originally analyzed within holding time on (August 5, 1999), however the quality control standard showed over-recovery. Sample contained a non-target compound which elutes in the same window as MTBE.
- 12 Laboratory report indicates gasoline C6-C12.
- 13 Skimmer not in well. Refer to field sheets.
- 14 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.
- 15 Laboratory report indicates weathered gasoline C6-C12.
- 16 Laboratory report indicates gas range.
- 17 Laboratory report indicates gas pattern.

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

**EXPLANATIONS:**

- 18 Laboratory report indicates early peaks.
- 19 Bailed 0.35 gallons of water + product.
- 20 Samples were misplaced at the laboratory; analysis was not performed.
- 21 Bailed 0.25 gallons of water + product.
- 22 Bailed 0.50 gallons of water + product.
- 23 Laboratory report indicates this sample was analyzed beyond the EPA recommended holding time.
- 24 Laboratory report indicates discrete peak @ MTBE.
- 25 Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
- 26 Weathered gasoline.

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-1</b>	04/15/98	ND	ND	45	ND	ND	ND	--
	07/15/98	ND	ND	13	ND	ND	ND	--
	10/15/98	ND <sup>1</sup>	ND <sup>1</sup>	14.8	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	01/27/99	ND	ND	8.5	ND	ND	ND	--
	04/22/99	ND	ND	4.9	ND	ND	ND	--
	07/22/99 <sup>3</sup>	ND	ND	10	ND	ND	ND	--
	04/24/03	--	<100	70	<2.0	<2.0	<2.0	--
	07/30/03	--	<100	86	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	21	<2.0	<2.0	<2.0	<2.0
	01/08/04	--	<5.0	4.2	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	30	1.2	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	4.7	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	5.5	<0.50	<0.50	15	<0.50
	02/17/05	--	<5.0	1.4	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	2.8	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;50</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>
<b>MW-2</b>	04/15/98	ND	ND	49	ND	ND	ND	--
	07/15/98	ND <sup>1</sup>	ND <sup>1</sup>	420	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	10/15/98	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	01/27/99	ND <sup>1</sup>	ND <sup>1</sup>	190	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/22/99	ND <sup>1</sup>	ND <sup>1</sup>	270	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	07/22/99 <sup>3</sup>	ND <sup>1</sup>	ND <sup>1</sup>	340	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/24/03	--	<5,000	<100	<100	<100	<100	--
	07/30/03	--	<5,000	220	<100	<100	<100	<100
	10/16/03	--	<4,000	86	<80	<80	<80	<80
	01/08/04	--	<100	330	<10	<10	<10	<10
	05/11/04	--	1,500	280	<25	<25	<25	<25
	08/05/04	--	<5.0	15	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<50	360	<5.0	<5.0	28	<5.0
	02/17/05	--	<250	100	<25	<25	<25	<25
	05/16/05	--	<5.0	110	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;250</b>	<b>400</b>	<b>&lt;25</b>	<b>&lt;25</b>	<b>&lt;25</b>	<b>&lt;25</b>

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-3</b>	04/15/98	ND	ND	ND	ND	ND	ND	--
	07/15/98	ND	ND	20	ND	ND	ND	--
	10/15/98	ND <sup>1</sup>	ND <sup>1</sup>	312	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	01/27/99	ND	ND	19	ND	ND	ND	--
	04/22/99	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	07/22/99 <sup>3</sup>	ND <sup>1</sup>	ND <sup>1</sup>	220	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/24/03	--	<500	<10	<10	<10	<10	--
	07/30/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/08/04	--	<5.0	29	<0.50	<0.50	<0.50	3.0
	05/11/04	--	110	39	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	76	<0.50	<0.50	2.5	2.8
	11/03/04	--	<5.0	53	<0.50	<0.50	3.8	1.9
	02/17/05	--	<5.0	7.3	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	8.4	<0.50	<0.50	<0.50	1.7
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>48</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.8</b>	<b>2.5</b>
<b>MW-4</b>	04/15/98	ND	ND	36	ND	ND	ND	--
	07/15/98	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	10/15/98	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	01/27/99	ND <sup>1</sup>	ND <sup>1</sup>	57	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/22/99	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	07/22/99 <sup>3</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/24/03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	07/30/03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	10/16/03	--	<10,000	<200	<200	<200	<200	<200
	01/07/04	--	<100	50	<10	<10	<10	<10
	05/11/04	--	2,600	12	<10	<10	<10	<10
	08/05/04	--	--	--	--	--	--	--
	11/02/04	--	--	--	--	--	--	--
	02/17/05	--	--	--	--	--	--	--
	05/16/05	--	<5.0	13	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;500</b>	<b>56</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;50</b>

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
MW-5	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99 <sup>2</sup>	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	0.80	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	0.79	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	0.82	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	0.71	<0.50	<0.50	<0.50	<0.50
MW-6	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	0.88
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-7</b>	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-8</b>	04/15/98	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	77	ND <sup>1</sup>	ND <sup>1</sup>	--
	07/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	01/27/99	ND	ND	ND	63	ND	ND	--
	04/22/99	ND <sup>1</sup>	ND <sup>1</sup>	71	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	--
	07/22/99 <sup>3</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	85	ND <sup>1</sup>	ND <sup>1</sup>	--
	04/24/03	--	<2,000	<40	<40	<40	<40	--
	07/30/03	--	<500	<10	18	<10	<10	<10
	10/16/03	--	<1,000	<20	23	<20	<20	<20
	01/07/04	--	<25	<2.5	43	<2.5	<2.5	3.6
	05/11/04	--	450	<2.5	<2.5	<2.5	<2.5	<2.5
	08/05/04	--	<5.0	<0.50	33	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	33	<0.50	<0.50	<0.50
	02/17/05	--	<50	<5.0	24	<5.0	<5.0	<5.0
	05/16/05	--	<100	<10	<10	<10	<10	<10
	<b>8/23-24/2005</b>	--	<b>&lt;500</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;50</b>

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-9</b>	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	INACCESSIBLE - PAVED OVER		--	--	--	--	--
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW-10</b>	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	INACCESSIBLE - PAVED OVER		--	--	--	--	--
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
MW-11	04/15/98	ND	ND	ND	ND	ND	ND	--
	10/15/98	ND	ND	ND	ND	ND	ND	--
	04/22/99	ND	ND	ND	ND	ND	ND	--
	04/24/03	--	<100	<2.0	<2.0	<2.0	<2.0	--
	07/30/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	10/16/03	--	<100	<2.0	<2.0	<2.0	<2.0	<2.0
	01/07/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
MW-12A	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	13
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	19
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	14
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	21
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	14
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	23
MW-12B	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	0.59
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	8/23-24/2005	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-13A</b>	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	0.50
	08/05/04	--	<5.0	<0.50	0.70	<0.50	<0.50	0.61
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	0.64	<0.50	<0.50	0.54
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>1.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.64</b>
<b>MW-13B</b>	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	0.53	<0.50	<0.50	<0.50
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>08/23/05</b>	--	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-14A</b>	05/11/04	--	6.9	10	<0.50	<0.50	<0.50	4.2
	08/05/04	--	6.4	21	<0.50	<0.50	<0.50	9.4
	11/03/04	--	<5.0	22	<0.50	<0.50	<0.50	8.2
	02/17/05	--	<5.0	32	<0.50	<0.50	<0.50	14
	05/16/05	--	9.9	16	<0.50	<0.50	<0.50	7.2
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>20</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>9.8</b>
<b>MW-14B</b>	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/03/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Unocal Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )
<b>MW-15</b>	05/11/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/05/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/02/04	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/17/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/16/05	--	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>8/23-24/2005</b>	--	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>

**EXPLANATIONS:**

TBA = Tertiary butyl alcohol  
MTBE = Methyl tertiary butyl ether  
DIPE = Di-isopropyl ether  
ETBE = Ethyl tertiary butyl ether  
TAME = Tertiary amyl methyl ether  
1,2 DCA = 1,2-Dichloroethane  
 $\mu\text{g/L}$  = Micrograms per Liter  
ND = Not Detected  
-- = Not Analyzed

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds

- 1 Detection limit raised. Refer to analytical reports.
- 2 Laboratory indicates sample was re-run past hold time (May 10, 1999).
- 3 MTBE by EPA Method 8260 analyzed past hold time (August 11, 1999). Sample was originally analyzed within holding time on (August 5, 1999), however the quality control standard showed over-recovery. Sample contained a non-target compound which elutes in the same window as MTBE.

**Table 3**  
**Groundwater Analytical Results - Dissolved Metals**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	U (ug/L)	Cr (ug/L)	Pb (ug/L)	Mo (ug/L)	Se (ug/L)	V (ug/L)
<b>MW-1</b>	04/24/03	0.77	0.093	<0.10	<0.040	<0.10	<0.040
	05/11/04	5.7	<1.0	<5.0	8.1	<5.0	3.2
	<b>05/16/05</b>	<b>4.6</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>	<b>8.6</b>	<b>&lt;5.0</b>	<b>5.7</b>
<b>MW-2</b>	04/24/03	0.29	<0.010	<0.10	<0.040	<0.10	<0.040
	05/11/04	4.9	<1.0	13	<2.0	<5.0	<3.0
	<b>05/16/05</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>5.0</b>	<b>3.6</b>	<b>&lt;5.0</b>	<b>&lt;3.0</b>
<b>MW-3</b>	04/24/03	0.21	0.041	<0.10	<0.040	<0.10	<0.040
	05/11/04	14	<1.0	<5.0	3.8	<5.0	<3.0
	<b>05/16/05</b>	<b>3.0</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>	<b>3.0</b>	<b>&lt;5.0</b>	<b>&lt;3.0</b>
<b>MW-4</b>	04/24/03	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--
	05/11/04	<1.0	<1.0	17	<2.0	<5.0	<3.0
	<b>05/16/05</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>7.9</b>	<b>2.6</b>	<b>&lt;5.0</b>	<b>&lt;3.0</b>
<b>MW-5</b>	04/24/03	13.4	<0.010	<0.10	<0.040	<0.10	<0.040
	05/11/04	18	<1.0	<5.0	<2.0	<5.0	3.4
	<b>05/16/05</b>	<b>24</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>	<b>2.2</b>	<b>&lt;5.0</b>	<b>4.5</b>
<b>MW-6</b>	04/24/03	0.63	0.015	<0.10	<0.040	<0.10	<0.040
	05/11/04	<1.0	<1.0	<5.0	<2.0	<5.0	4.0
	<b>05/16/05</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>	<b>&lt;2.0</b>	<b>&lt;5.0</b>	<b>5.4</b>
<b>MW-7</b>	04/24/03	0.21	0.026	<0.10	<0.040	<0.10	<0.040
	05/11/04	5.6	<1.0	<5.0	<2.0	<5.0	6.6
	<b>05/16/05</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>	<b>2.2</b>	<b>&lt;5.0</b>	<b>&lt;3.0</b>
<b>MW-8</b>	04/24/03	0.15	0.037	<0.10	<0.040	<0.10	<0.040
	05/11/04	5.6	<1.0	14	<2.0	<5.0	<3.0
	<b>05/16/05</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>8.4</b>	<b>&lt;2.0</b>	<b>&lt;5.0</b>	<b>&lt;3.0</b>

**EXPLANATIONS:**

Cr = Chromium  
 Mo = Molybdenum  
 Pb = Lead  
 Se = Selenium  
 V = Vanadium  
 U = Uranium  
 µg/L = Micrograms per Liter  
 -- = Not Analyzed

**ANALYTICAL METHODS:**

Dissolved Metals by EPA 200 Series  
 Uranium by EPA Method 908.0

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-1</b>	10/20/99	3.9	--
	01/05/00	4.0	--
	04/06/00	3.5	--
	07/21/00	2.1	--
	10/30/00	3.1	--
	01/24/01	1.9	--
	04/25/01	3.6	--
	07/25/01	3.3	--
	10/24/01	4.5	--
	01/23/02	3.2	--
	04/24/02	3.2	--
	07/24/02	3.6	--
	10/18/02	1.4	--
	02/03-04/03	1.0	0.8
	04/24/03	0.4	--
	07/30/03	1.8	--
	10/16/03	1.9	--
	01/08/04	--	5.5
	05/12/04	7.1	1.1
	08/05/04	3.3	7.0
	11/03/04	3.3	1.7
	02/17/05	5.2	1.0
	05/16/05	2.7	3.7
	<b>08/24/05</b>	<b>5.4</b>	<b>4.9</b>
<b>MW-2</b>	10/20/99 <sup>1</sup>	1.9	--
	01/05/00 <sup>1</sup>	2.2	--
	04/06/00 <sup>1</sup>	4.1	--
	07/21/00 <sup>1</sup>	1.9	--
	10/30/00 <sup>1</sup>	2.3	--
	01/24/01 <sup>1</sup>	3.0	--
	04/25/01 <sup>1</sup>	4.0	--
	07/25/01 <sup>1</sup>	6.4	--
	10/24/01 <sup>1</sup>	4.5	--
	01/23/02 <sup>1</sup>	4.9	--
	04/24/02 <sup>1</sup>	4.0	--
	07/24/02 <sup>1</sup>	3.1	--
	10/18/02	INACCESSIBLE - CAR PARKED OVER WELL	
	02/03-04/03 <sup>1</sup>	1.6	--
	04/24/03	0.8	--
	07/30/03 <sup>1</sup>	0.9	--
	10/16/03 <sup>1</sup>	0.6	--
	01/08/04	--	3.9
	05/12/04	4.0	1.0
	08/05/04	5.1	0.6
	11/03/04	2.6	0.9
	02/18/05	2.5	0.8
	05/16/05	4.2	3.9
	<b>08/24/05</b>	<b>5.1</b>	<b>4.7</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-3</b>	10/20/99	3.9	--
	01/05/00	3.4	--
	04/06/00	3.2	--
	07/21/00	2.0	--
	10/30/00	2.8	--
	01/24/01	2.0	--
	04/25/01	2.8	--
	07/25/01	2.4	--
	10/24/01	4.0	--
	01/23/02	2.8	--
	04/24/02	3.4	--
	07/24/02	3.3	--
	10/18/02	1.1	--
	02/03-04/03	0.1	--
	04/24/03	0.5	--
	07/30/03	1.1	--
	10/16/03	2.1	--
	01/08/04	--	6.1
	05/12/04	3.7	0.9
	08/05/04	2.4	0.7
	11/03/04	3.5	1.7
	02/17/05	4.3	1.3
	05/16/05	4.7	7.1
	<b>08/24/05</b>	<b>5.7</b>	<b>4.4</b>
<b>MW-4</b>	10/20/99	1.9	--
	01/05/00 <sup>2</sup>	1.7	--
	04/06/00	4.2	--
	07/21/00	1.9	--
	10/30/00	1.7	--
	01/24/01	2.7	--
	04/25/01	3.7	--
	07/25/01	5.1	--
	10/24/01	NOT MEASURED DUE TO FREE PRODUCT	
	01/23/02	NOT MEASURED DUE TO FREE PRODUCT	
	04/24/02	NOT MEASURED DUE TO FREE PRODUCT	
	07/24/02	NOT MEASURED DUE TO FREE PRODUCT	
	10/18/02	NOT MEASURED DUE TO FREE PRODUCT	
	02/03-04/03	NOT MEASURED DUE TO FREE PRODUCT	
	04/24/03	NOT MEASURED DUE TO FREE PRODUCT	
	07/30/03	NOT MEASURED DUE TO FREE PRODUCT	
	10/16/03	0.5	--
	01/07/04	--	5.4
	05/12/04	3.9	0.7
	08/05/04	NOT MEASURED DUE TO FREE PRODUCT	
	11/03/04	4.1	0.3
	02/18/05	NOT MEASURED DUE TO FREE PRODUCT	
	05/16/05	7.9	3.5
	<b>08/24/05</b>	<b>4.6</b>	<b>3.3</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-5</b>	10/20/99	4.7	--
	01/05/00	4.7	--
	04/06/00	4.3	--
	07/21/00	3.5	--
	10/30/00	4.0	--
	01/24/01	3.3	--
	04/25/01	4.6	--
	07/25/01	2.9	--
	10/24/01	5.5	--
	01/23/02	4.4	--
	04/24/02	3.5	--
	07/24/02	4.1	--
	10/18/02	INACCESSIBLE - CAR PARKED OVER WELL	
	02/03-04/03	--	--
	04/24/03	0.3	--
	07/30/03	3.5	--
	10/16/03	3.7	--
	01/08/04	--	5.3
	05/12/04	3.2	0.7
	08/05/04	4.7	0.7
	11/03/04	4.5	0.4
	02/17/05	5.5	1.1
	05/16/05	4.4	4.3
	<b>08/24/05</b>	<b>5.6</b>	<b>5.1</b>
<b>MW-6</b>	10/20/99	4.8	--
	01/05/00	5.0	--
	04/06/00	3.9	--
	07/21/00	2.0	--
	10/30/00	3.3	--
	01/24/01	2.0	--
	04/25/01	4.2	--
	07/25/01	3.2	--
	10/24/01	5.7	--
	01/23/02	4.9	--
	04/24/02	3.8	--
	07/24/02	3.8	--
	10/18/02	0.8	--
	02/03-04/03	--	--
	04/24/03	0.7	--
	07/30/03	3.0	--
	10/16/03	4.6	--
	01/07/04	--	5.1
	05/11/04	6.9	6.7
	08/05/04	2.0	6.8
	11/03/04	8.6	8.6
	02/17/05	2.7	1.0
	05/16/05	8.1	4.6
	<b>08/24/05</b>	<b>3.3</b>	<b>3.5</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-7</b>	10/20/99	5.1	--
	01/05/00	5.0	--
	04/06/00	3.8	--
	07/21/00	2.0	--
	10/30/00	3.7	--
	01/24/01	1.7	--
	04/25/01	3.9	--
	07/25/01	3.1	--
	10/24/01	5.4	--
	01/23/02	5.1	--
	04/24/02	4.2	--
	07/24/02	3.6	--
	10/18/02	1.1	--
	02/03-04/03	--	--
	04/24/03	0.4	--
	07/30/03	3.9	--
	10/16/03	3.6	--
	01/07/04	--	4.8
	05/12/04	2.2	8.1
	08/05/04	4.1	5.6
	11/03/04	8.2	9.8
	02/17/05	4.0	1.5
	05/16/05	5.7	4.2
	<b>08/23/05</b>	<b>4.4</b>	<b>0.9</b>
<b>MW-8</b>	10/20/99	1.7	--
	01/05/00 <sup>2</sup>	2.1	--
	04/06/00	4.3	--
	07/21/00	1.8	--
	10/30/00	2.3	--
	01/24/01	4.0	--
	04/25/01	4.4	--
	07/25/01	4.8	--
	10/24/01	4.3	--
	01/23/02	4.1	--
	04/24/02	3.8	--
	07/24/02	3.2	--
	10/18/02	1.2	--
	02/03-04/03	0.2	--
	04/24/03	0.5	--
	07/30/03	1.4	--
	10/16/03	0.9	--
	01/07/04	--	5.7
	05/12/04	6.0	3.0
	08/05/04	3.3	0.5
	11/03/04	3.9	0.9
	02/18/05	2.0	0.8
	05/16/05	5.2	4.2
	<b>08/24/05</b>	<b>4.7</b>	<b>0.7</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-9</b>	10/20/99	4.6	--
	01/05/00	4.7	--
	04/06/00	5.8	--
	07/21/00	4.4	--
	10/30/00	5.1	--
	01/24/01	4.0	--
	04/25/01	5.8	--
	07/25/01	4.7	--
	10/24/01	6.5	--
	01/23/02	5.7	--
	04/24/02	4.1	--
	07/24/02	3.4	--
	10/18/02	0.2	--
	02/03-04/03	--	--
	04/24/03	0.2	--
	07/30/03	INACCESSIBLE - PAVED OVER	--
	10/16/03	4.2	--
	01/07/04	--	8.6
	05/11/04	6.5	3.3
	08/05/04	5.1	2.6
	11/03/04	5.4	1.7
	02/17/05	7.0	3.7
	05/16/05	9.3	7.0
	<b>08/24/05</b>	<b>5.6</b>	<b>1.7</b>
<b>MW-10</b>	10/20/99	4.3	--
	01/05/00	4.8	--
	04/06/00	5.9	--
	07/21/00	4.6	--
	10/30/00	4.8	--
	01/24/01	4.2	--
	04/25/01	6.1	--
	07/25/01	5.1	--
	10/24/01	6.0	--
	01/23/02	5.5	--
	04/24/02	4.9	--
	07/24/02	3.2	--
	10/18/02	0.2	--
	02/03-04/03	--	--
	04/24/03	0.1	--
	07/30/03	INACCESSIBLE - PAVED OVER	--
	10/16/03	5.1	--
	01/07/04	--	7.6
	05/11/04	8.2	4.1
	08/05/04	5.0	2.9
	11/03/04	5.7	2.5
	02/17/05	6.0	4.2
	05/16/05	8.3	6.3
	<b>08/24/05</b>	<b>6.1</b>	<b>2.7</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**  
Former Unocal Service Station No. 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-11</b>	10/20/99	5.2	--
	01/05/00	4.8	--
	04/06/00	3.4	--
	07/21/00	2.2	--
	10/30/00	3.6	--
	01/24/01	1.9	--
	04/25/01	3.9	--
	07/25/01	2.9	--
	10/24/01	5.8	--
	01/23/02	4.8	--
	04/24/02	3.6	--
	07/24/02	4.8	--
	10/18/02	1.1	--
	02/03-04/03	--	--
	04/24/03	0.3	--
	07/30/03	3.5	--
	10/16/03	3.7	--
	01/07/04	--	6.5
	05/12/04	2.8	0.6
	08/05/04	1.2	7.4
	11/03/04	8.0	8.4
	02/17/05	3.7	1.3
	05/16/05	5.1	4.4
	<b>08/24/05</b>	<b>4.4</b>	<b>1.8</b>
<b>MW-12A</b>	08/05/04	4.2	0.6
	11/03/04	7.9	0.8
	02/17/05	9.5	0.7
	05/16/05	8.6	4.1
	<b>08/23/05</b>	<b>8.0</b>	<b>0.3</b>
<b>MW-12B</b>	08/05/04	3.6	0.6
	11/03/04	3.9	3.5
	02/17/05	4.6	0.9
	05/16/05	7.4	4.2
	<b>08/23/05</b>	<b>6.9</b>	<b>0.6</b>
<b>MW-13A</b>	08/05/04	2.0	0.6
	11/03/04	4.2	0.4
	02/17/05	9.3	0.9
	05/16/05	6.0	2.0
	<b>08/23/05</b>	<b>4.0</b>	<b>0.5</b>
<b>MW-13B</b>	08/05/04	5.2	9.5
	11/03/04	3.6	1.1
	02/17/05	5.0	0.7
	05/16/05	4.6	5.5
	<b>08/23/05</b>	<b>6.0</b>	<b>2.5</b>

**Table 4**  
**Groundwater Dissolved Oxygen Concentrations**

Former Unocal Service Station No. 2672  
 1075 Santa Rosa Avenue  
 Santa Rosa, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
<b>MW-14A</b>	08/05/04	3.2	15.4
	11/03/04	7.2	9.1
	02/17/05	5.9	0.8
	05/16/05	5.2	9.3
	<b>08/23/05</b>	7.6	2.4
<b>MW-14B</b>	08/05/04	4.4	1.3
	11/03/04	3.7	1.0
	02/17/05	5.5	1.1
	05/16/05	4.6	4.8
	<b>08/23/05</b>	5.8	0.9
<b>MW-15</b>	08/05/04	1.9	11.9
	11/03/04	3.4	5.8
	02/17/05	4.8	1.0
	05/16/05	5.9	4.2
	<b>08/23/05</b>	4.5	1.0

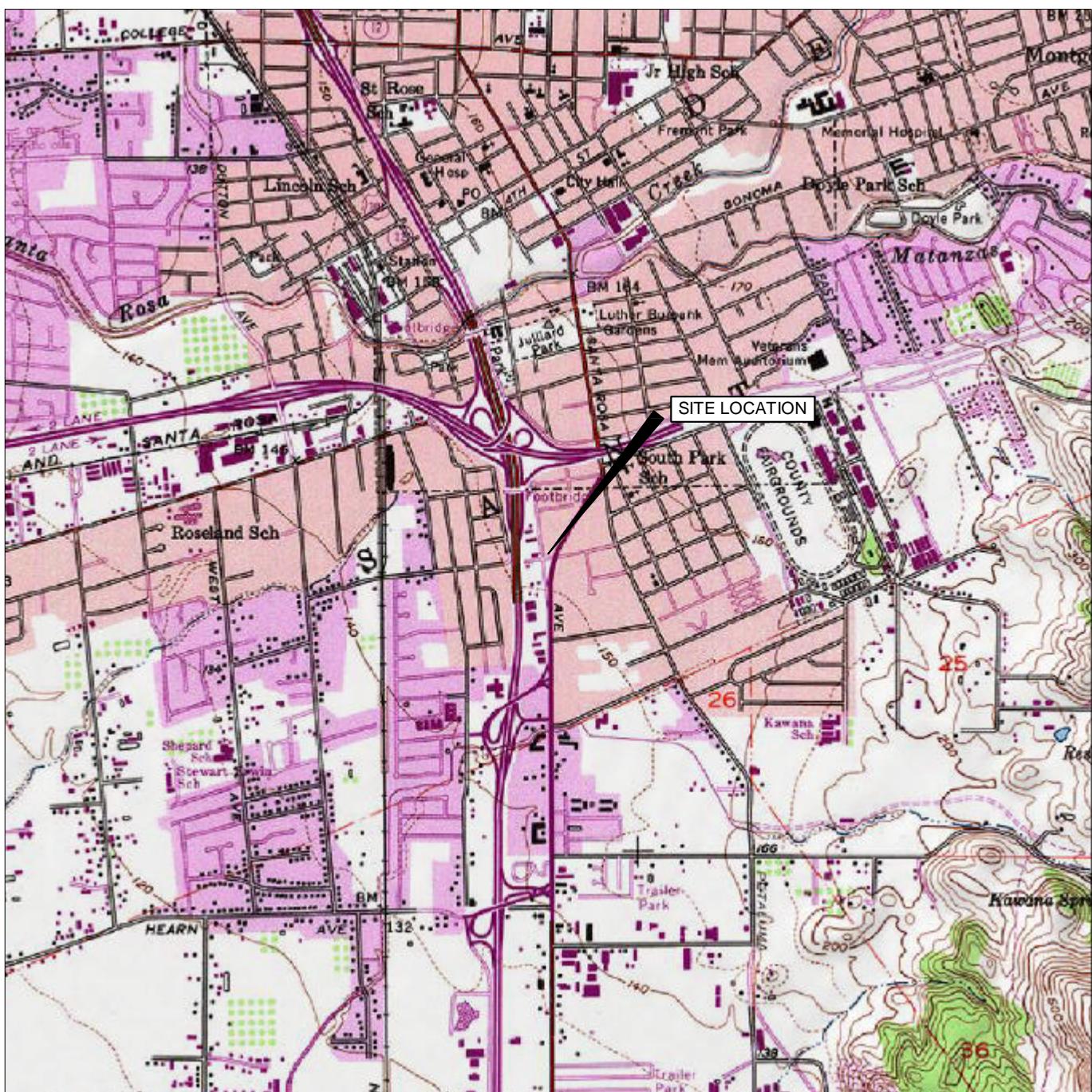
**EXPLANATIONS:**

mg/L = Milligrams per liter  
 -- = Not Measured

- 1 Skimmer present in well.  
 2 Skimmer not in well. Refer to field sheets.



## FIGURES



Map created with TOPO - 2003 National Geographic



MAP LOCATION

SOURCE: BASE MAP FROM USGS SANTA ROSA, CA  
7.5 MINUTE TOPOGRAPHIC 1994

0 2000  
Approximate Scale  
in Feet

N

FIGURE

1



10411 Old Placerville Road Ste 210  
Sacramento, California 95827  
Phone: (916) 362-7100  
Fax: (916) 362-8100  
Web: WWW.ENS.R.COM

### SITE LOCATION MAP

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

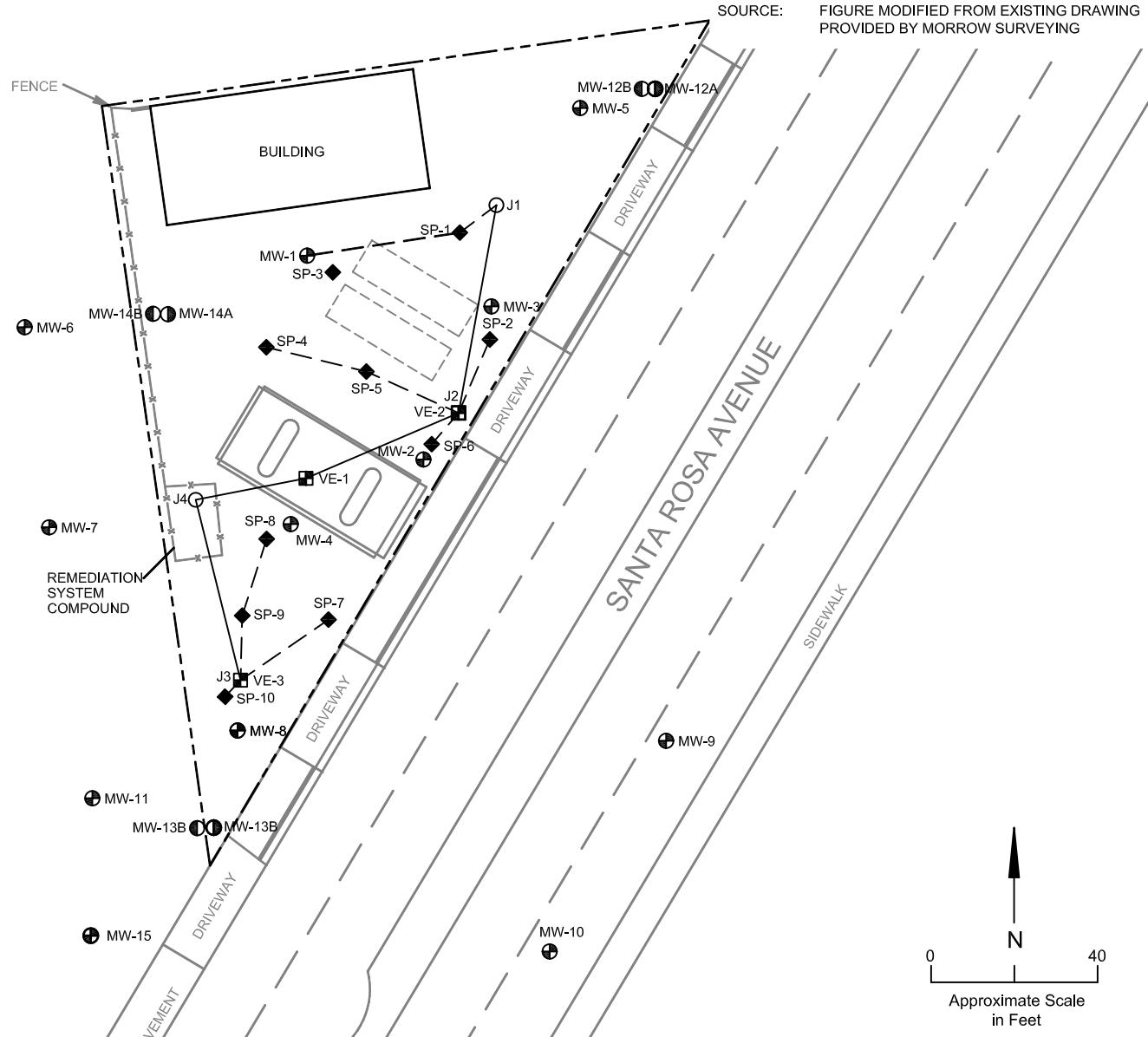
DRAWN BY  
G BORCHARDT

DATE  
3/16/2005 PR

PROJECT NUMBER  
06940-268

FRANCISCO'S AUTO SERVICE

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY MORROW SURVEYING



LEGEND

- SHALLOW GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- ◆ OZONE SPARGE POINT
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL
- 2" BELOW GROUND CONDUIT SCHEDULE 40 PVC
- 6" BELOW GROUND CONDUIT SCHEDULE 40 PVC
- J4 ○ 36" JUNCTION BOX

**ENSR**  
INTERNATIONAL

10411 Old Placerville Road Ste 210  
Sacramento, California 95827  
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Fax: (916) 362-8100  
Web: WWW.ENSRCOM

**SITE MAP**

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

Quarterly Monitoring Report  
3rd Quarter 2005

DRAWN BY	DATE	PROJECT NUMBER
E. Cowan	10/06/2005	06940-268-100

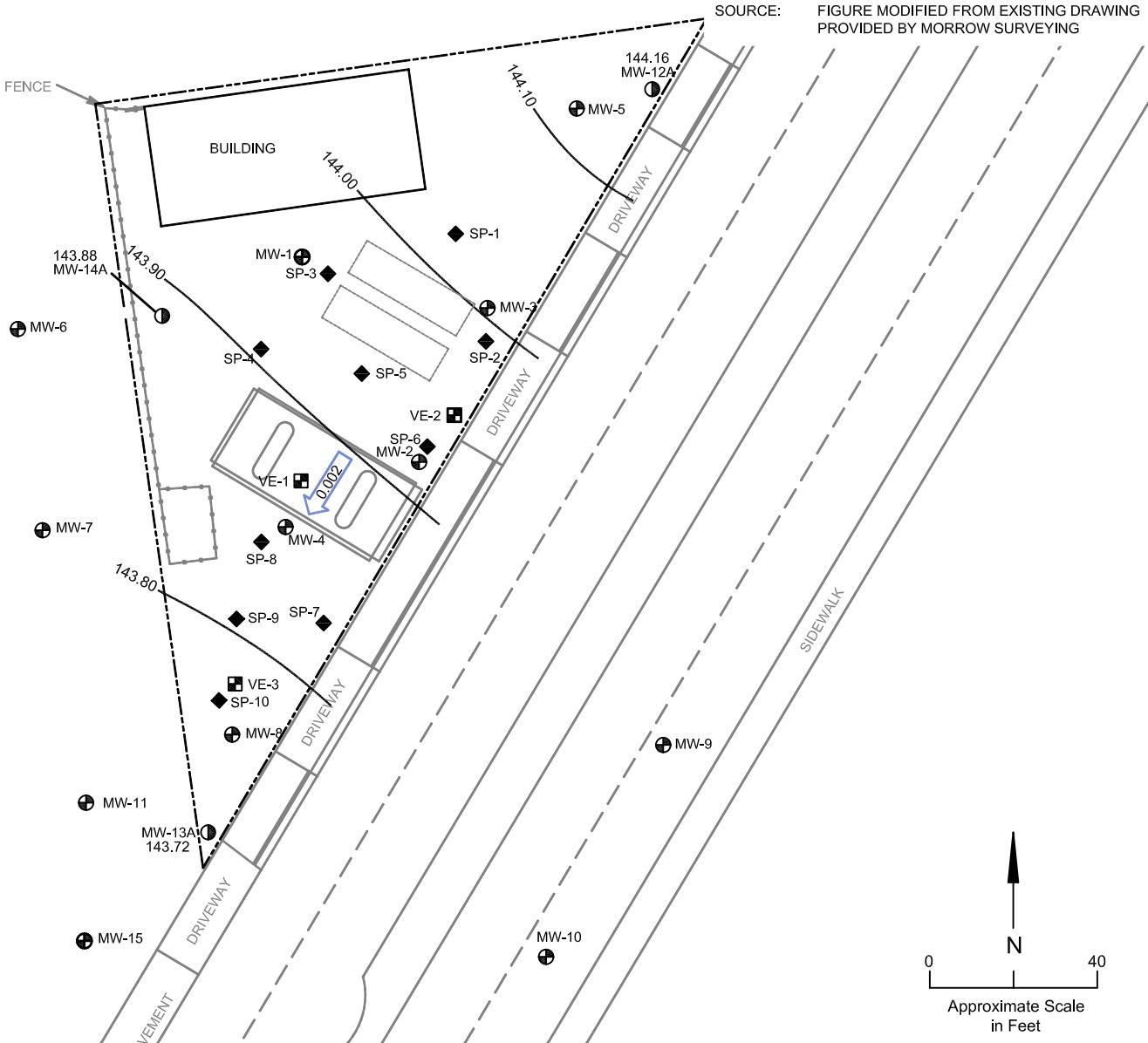
FIGURE

2



FRANCISCO'S AUTO SERVICE

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY MORROW SURVEYING



LEGEND

- ⊕ SHALLOW GROUNDWATER MONITORING WELL
- ▣ VAPOR EXTRACTION WELL
- ◆ OZONE SPARGE POINT
- INTERMEDIATE MONITORING WELL

144.16 GROUNDWATER ELEVATION IN FEET  
MEAN SEA LEVEL

— 144.10 — GROUNDWATER ELEVATION CONTOUR

↖ 0.002 APPROXIMATE GROUNDWATER FLOW DIRECTION  
AND GRADIENT IN Ft/Ft



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GROUNDWATER ELEVATION CONTOUR MAP  
INTERMEDIATE ZONE

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

Quarterly Monitoring Report  
3rd Quarter 2005  
August 23, 2005

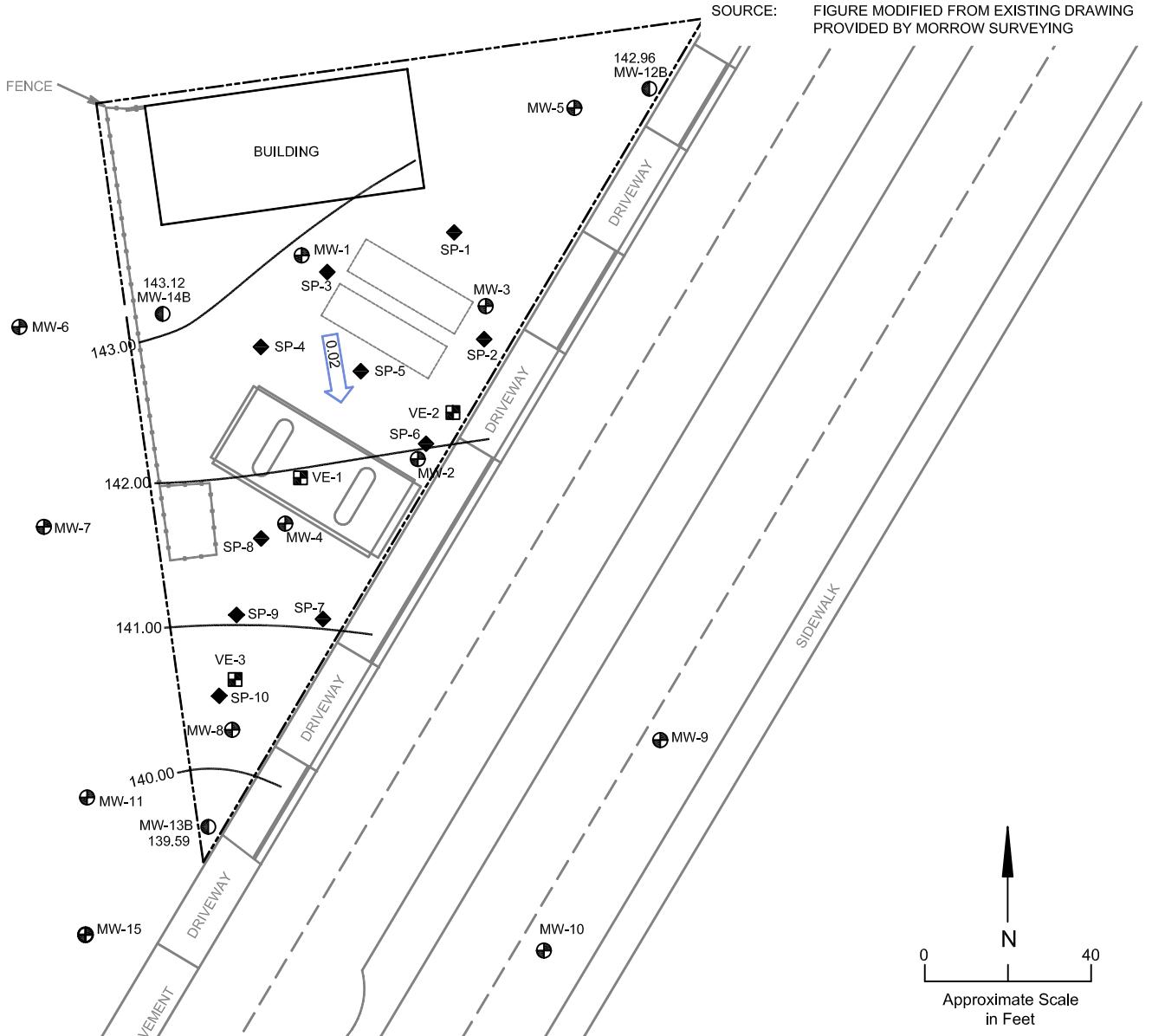
DRAWN BY	DATE	PROJECT NUMBER
E. Cowan	10/06/2005	06940-268-100

0  
40  
Approximate Scale  
in Feet

FIGURE

4

FRANCISCO'S AUTO SERVICE



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## GROUNDWATER ELEVATION CONTOUR MAP DEEP ZONE

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

Quarterly Monitoring Report  
3rd Quarter 2005  
August 23, 2005

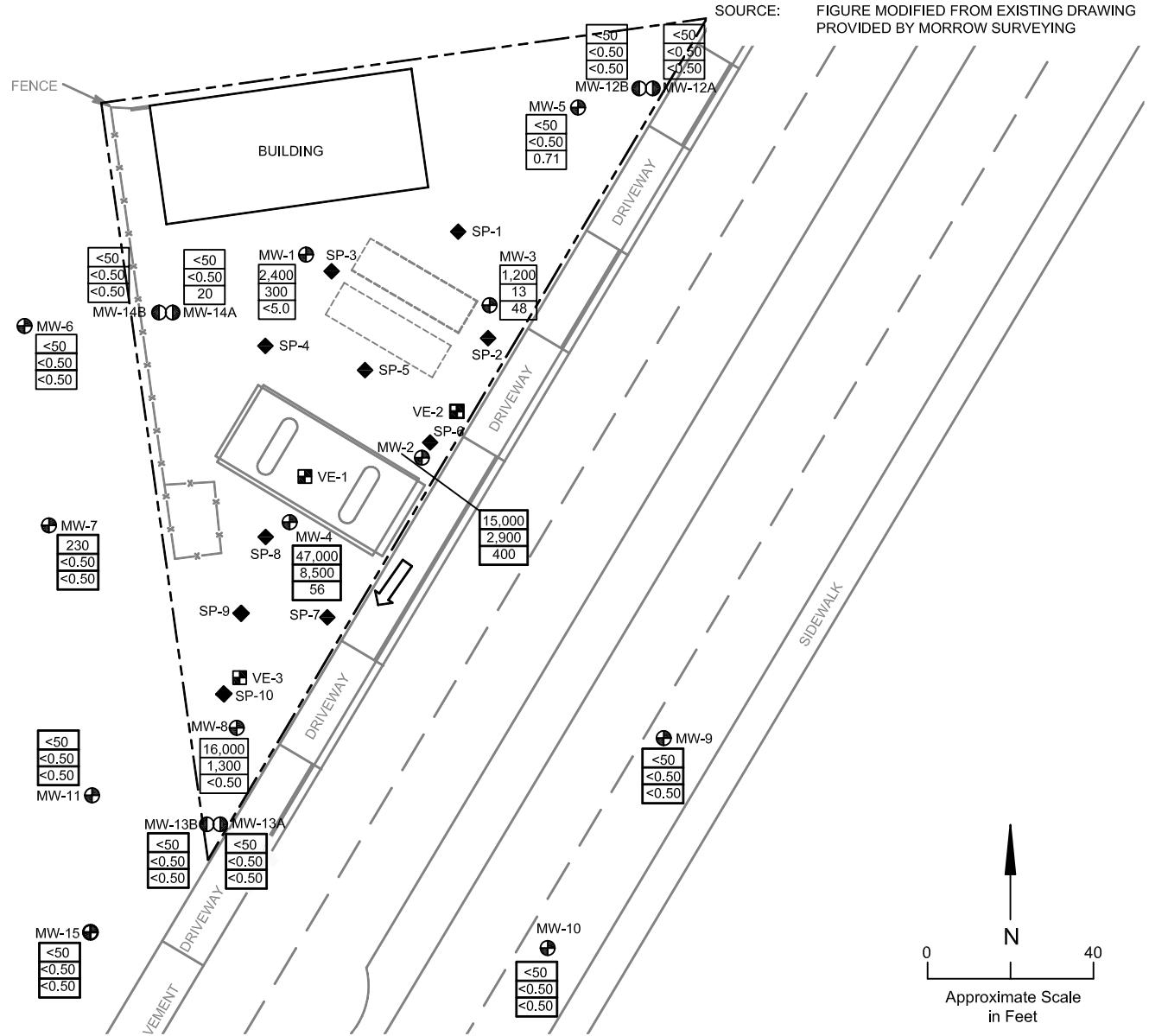
DRAWN BY	DATE	PROJECT NUMBER
E. Cowan	10/06/2005	06940-268-100

FIGURE

5

FRANCISCO'S AUTO SERVICE

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY MORROW SURVEYING



LEGEND

- SHALLOW GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- OZONE SPARGE POINT
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL

47,000 TPHg  
8,500 BENZENE  
56 MTBE

ALL CONCENTRATIONS IN MICROGRAMS PER LITER

APPRAXIMATE GROUNDWATER FLOW DIRECTION



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PETROLEUM HYDROCARBON CONCENTRATION MAP

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

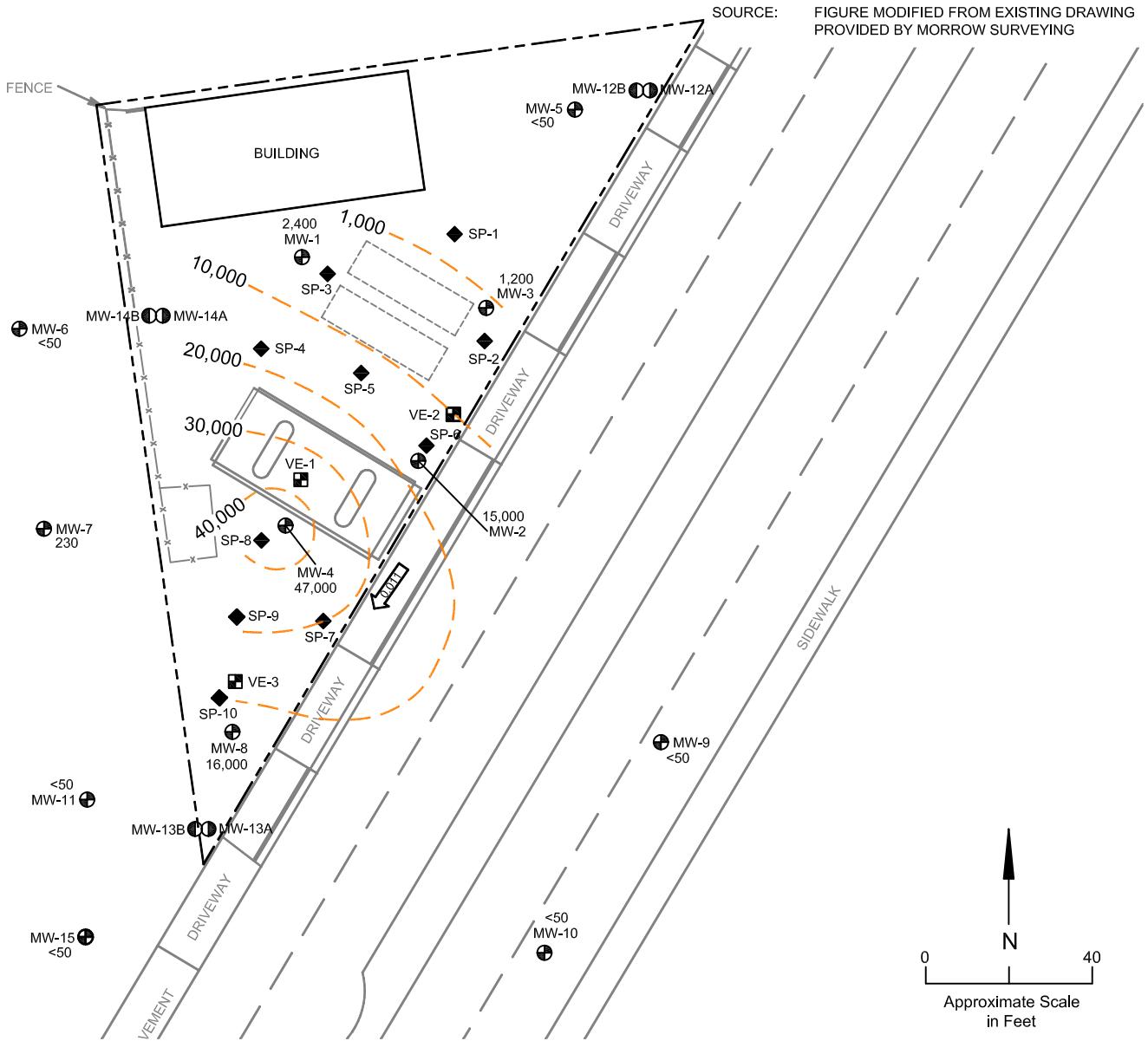
Quarterly Monitoring Report  
3rd Quarter 2005  
August 23 & 24, 2005

DRAWN BY	DATE	PROJECT NUMBER
E. Cowan	10/06/2005	06940-268-100

FIGURE

6

FRANCISCO'S AUTO SERVICE



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## DISSOLVED TPHg IN SHALLOW ZONE ISOCONCENTRATION MAP

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

Quarterly Monitoring Report  
3rd Quarter 2005  
August 23 & 24, 2005

DRAWN BY	DATE	PROJECT NUMBER
E. Cowan	10/06/2005	06940-268-100

FIGURE

7

FRANCISCO'S AUTO SERVICE

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY MORROW SURVEYING

BUILDING

FENCE

MW-5  
<0.50

DRIVEWAY

500

1,000

1,500

2,000

2,500

3,000

3,500

4,000

4,500

5,000

5,500

6,000

6,500

7,000

7,500

8,000

8,500

SP-1

SP-2

SP-3

SP-4

SP-5

SP-6

SP-7

SP-8

SP-9

SP-10

VE-1

VE-2

VE-3

VE-4

VE-5

VE-6

VE-7

MW-12B  
MW-12A

13

MW-3

MW-2

MW-1

MW-14B

MW-14A

MW-7

MW-6

MW-11

MW-10

MW-9

MW-8

MW-13B

MW-13A

MW-15

MW-12

MW-13

MW-14

MW-15

MW-16

DRIVEWAY

VEMENT

DRIVEWAY

VEMENT

DRIVEWAY

VEMENT

DRIVEWAY

VEMENT

DRIVEWAY

VEMENT

DRIVEWAY

VEMENT

DRIVEWAY

SIDWALK

0 40  
Approximate Scale in Feet

FIGURE

8

LEGEND

- SHALLOW GROUNDWATER MONITORING WELL
  - VAPOR EXTRACTION WELL
  - ◆ OZONE SPARGE POINT
  - INTERMEDIATE MONITORING WELL
  - DEEP MONITORING WELL
- Benzene Isoconcentration
- ALL CONCENTRATIONS IN MICROGRAMS PER LITER

0.011 APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN FT/FT



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Fax: (916) 362-8100  
Web: WWW.ENSER.COM

DISSOLVED BENZENE IN SHALLOW ZONE ISOCONCENTRATION MAP

Former UNOCAL Station 2672  
1075 Santa Rosa Avenue  
Santa Rosa, California

Quarterly Monitoring Report  
3rd Quarter 2005  
August 23 & 24, 2005

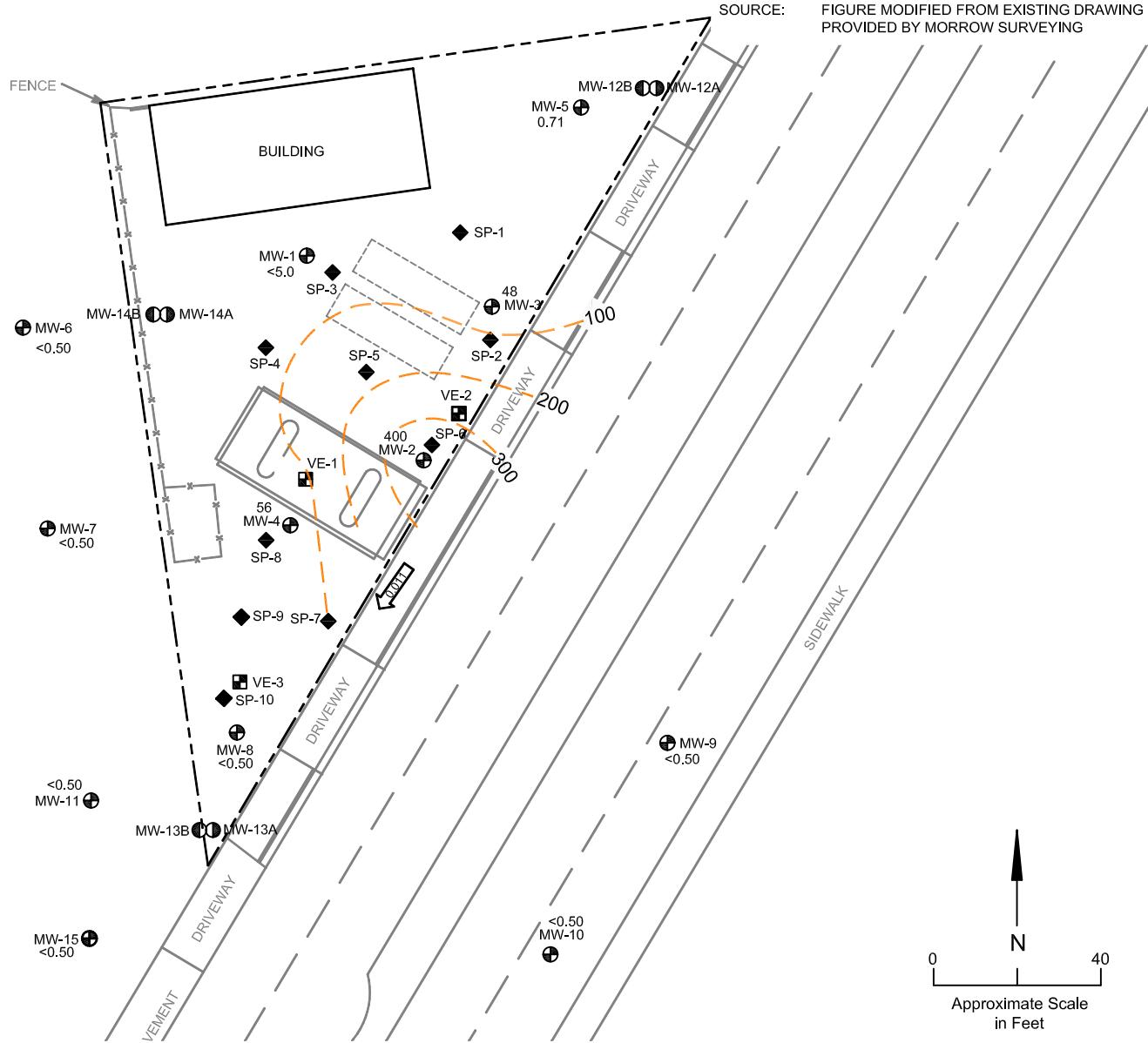
DRAWN BY  
E. Cowan

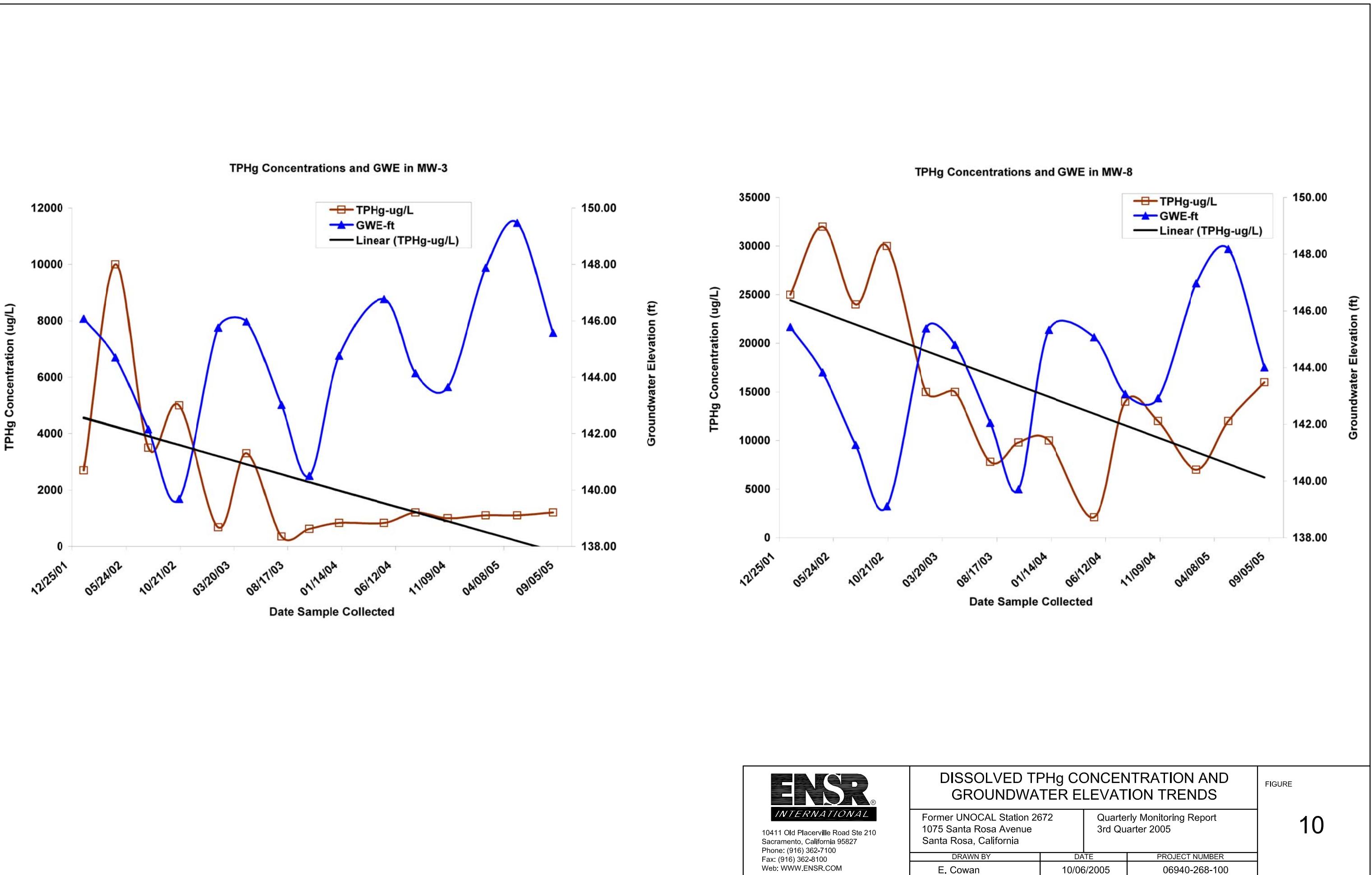
DATE  
10/06/2005

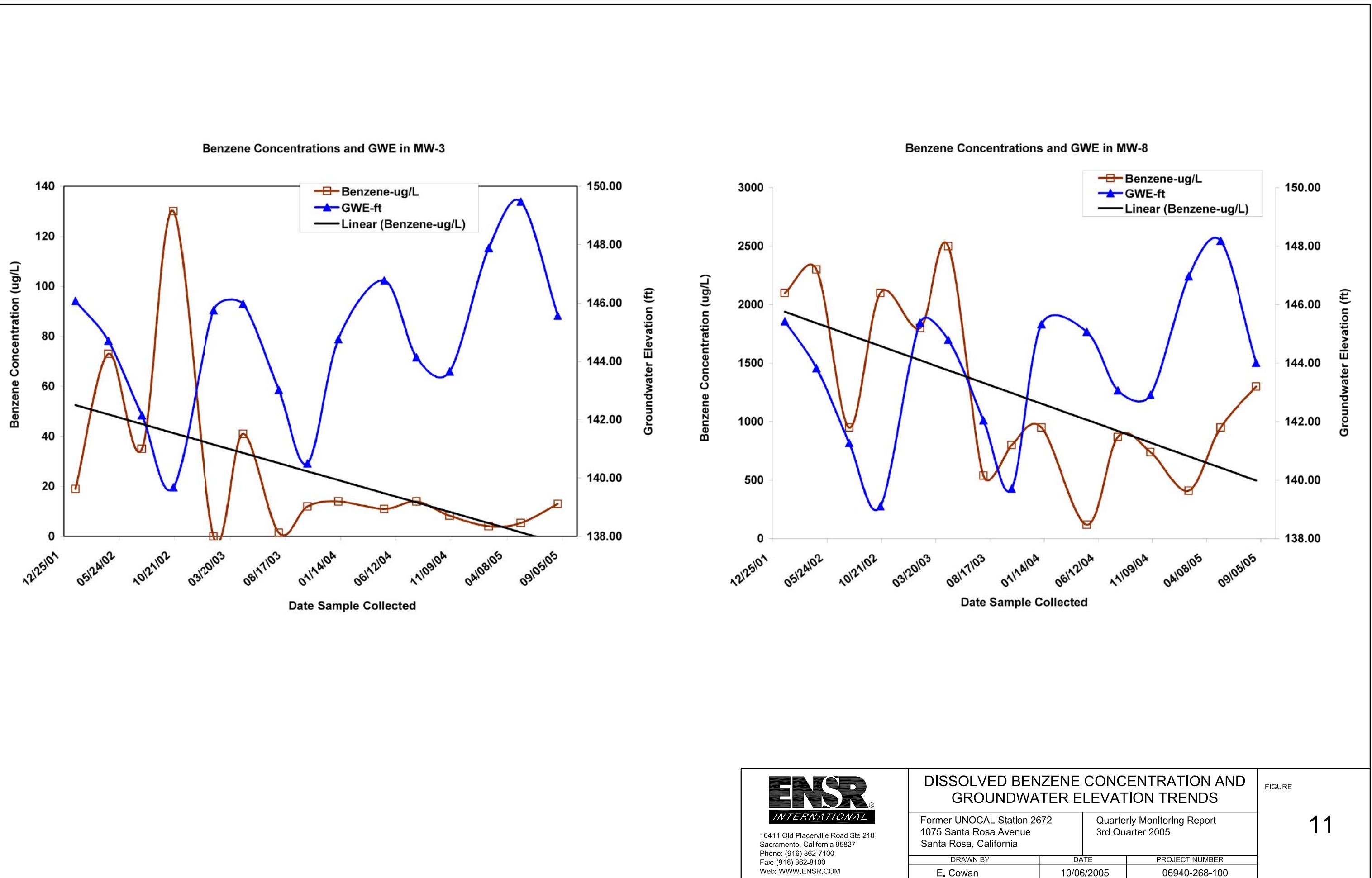
PROJECT NUMBER  
06940-268-100

FRANCISCO'S AUTO SERVICE

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY MORROW SURVEYING









**ATTACHMENT A**

**FIELD METHODS AND PROCEDURES**



## **FIELD METHODS AND PROCEDURES**

The following section describes field procedures that are to be used by ENSR personnel in the performance of the tasks involved with this project.

### **1. HEALTH AND SAFETY PLAN**

Fieldwork performed by ENSR and ENSR's subcontractors at the site will be conducted according to guidelines established in a Health and Safety Plan (HASP). The HASP is a document that describes the hazards that may be encountered in the field and specifies protective equipment, work procedures and emergency information. A copy of the HASP will be at the site and available for reference by appropriate parties during work at the site.

### **2. GROUNDWATER DEPTH ASSESSMENT**

A water/product interface probe is used to assess the liquid-phase hydrocarbons (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for LPH sheen.

### **3. SUBJECTIVE ANALYSIS OF GROUNDWATER**

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

### **4. MONITORING WELL SAMPLING**

Monitoring wells are purged using a pump or bailer until pH, temperature and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. The purge water is placed in 55-gallon drums and temporarily stored on-site pending evaluation of disposal options. If three well volumes cannot be removed in one-half an hour's time, the well is allowed to recharge to 80 percent of original level. After recharging, a groundwater sample is then removed from each of the wells using a pump or disposable bailer. The water sample is collected, labeled and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to the accepted regulatory method pertaining to the site.

### **5. QUALITY ASSURANCE PLAN**

This section describes the field and analytical procedures to be followed by ENSR throughout the investigation.

#### **5.1 General Sample Collection and Handling Procedures**

Proper collection and handling are essential to ensure the quality of a sample. Each sample will be collected in the appropriate container, preserved correctly for the intended analysis and stored, prior to analysis, for no longer than the maximum allowable holding time. Details on the



procedures for collection and handling of soil samples from this project can be found in previous sections.

## **5.2 Sample Identification and Chain-of-Custody Procedures**

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection and a sample number unique to that sample. During soil sampling, this information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel and any other pertinent field observations will be recorded on the borehole log or in the field records.



**ATTACHMENT B**

**GROUNDWATER SAMPLING DATA SHEETS**



**GROUNDWATER/LIQUID LEVEL DATA**  
**(measurements in feet below TOC)**

Site: 1075 Santa Rosa Ave., Santa Rosa  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Date: 8-23-05  
 Recorded by: Troy Warkham

SAMPLING ORDER / WELL NO.	TIME OPENED	CGI	PID	O2	TIME MEASURED	DEPTH TO GR. WATER	MEASURED TOTAL DEPTH	DEPTH TO PRODUCT	PRODUCT THICKNESS	COMMENTS (TOC/TOB) (PRODUCT SKIMMER IN WELL)
MW-9		—	—	—	09:20	9.65	24.24	—	—	
MW-10		—	—	—	09:25	9.26	24.25	—	—	
MW-12A		—	—	—	09:25	12.45	54.80	—	—	
MW-12B		—	—	—	09:30	13.58	84.79	—	—	
MW-13A		—	—	—	09:38	11.76	54.71	—	—	
MW-13B		—	—	—	09:43	15.90	84.44	—	—	stopper to bottom of well box
MW-15		—	—	—	09:50	10.08	19.94	—	—	water inside well box
MW-14A		—	—	—	10:02	13.26	54.99	—	—	
MW-14B		—	—	—	11:03	13.93	84.98	—	—	
MW-7		—	—	—	11:04	10.70	23.30	—	—	water inside well box
MW-6		—	—	—	11:05	10.79	22.90	—	—	water inside well box
MW-11		—	—	—	11:11	9.96	23.05	—	—	water inside well box
MW-5		—	—	—	11:12	10.68	29.80	—	—	
MW-3		—	—	—	11:14	10.86	33.45	—	—	dry flaky mud on well cap and residue
MW-1		—	—	—	11:15	11.34	34.10	—	—	water in well box
MW-8		—	—	—	11:16	11.61	26.70	—	—	
MW-2		—	—	—	11:17	11.11	34.15	—	—	
MW-4		—	—	—	11:25	10.28	29.50	—	—	DO NOT SAMPLE IF FP PRESENT

Notes:

2/2 inch pigs in well, weighed 1 lb 30z, 2 new pigs weighed 3 0z.

**ENSR.**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piez ID: MW-12A

Well  Piezometer Field Tech(s): *Heather M. Dauler*Well Purging: 8/23/05

Date Purged:

Purge Method: Disposable bailer/other grundfos

Casing Material:

Well Diameter: 2.00 in.

Total Depth: 54.80 ft from TOC

Depth to Water: 12.45 ft from TOC

Water Column: 42.35 ft

Water Column Volume: 6.7 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

12.43 @ 13.31

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 20.92

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
13:17	0	0.5	8.0	21.3	0.09	5.17	~5	Cloudy	no odor	
13:20	1	2.20	0.6	20.5	0.10	5.87	570	cloudy	no odor	
13:23	2	14.2	0.4	20.4	0.10	5.98	380	little cloudy	no odor	
13:26	3	21.2	0.3	20.4	0.10	6.02	240	(little cloudy)	no odor	
	4									

Sample Collection:

Date Sampled: 8/23/05Sampling Method: Disposable Bailer/Other Bailed

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-12A	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	13:34

Comments \_ DO NOT SAMPLE FOR METALS--EVER

Signature *Heather M. Dauler*Date 8/23/05

Needs new cap + lock

**ENSR.**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well Purging:

Date Purged: 8/23/05

Purge Method: Disposable bailer/other groundfs

Casing Material:

PVC

2.00 in.

Well Diameter:

84.79 ft from TOC

Total Depth:

13.98 ft from TOC

Depth to Water:

71.21 ft

Water Column:

11.31 gal (WC X VF)

Well/Piezoe ID: MW-12B

Well  Piezometer 

Field Tech(s):

Matthew Tauscher

Weather Conditions: WARM 70's to 80's

15.84 @ 14:09

27.83

80% Recovery from TOC: = Total Depth - (Water Column X .8) =

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ( $\mu\text{S/cm}$ )	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
13:46	0	0.5	69	20.2	66	7.97	-5	cloudy	no odor	
13:52	1	11.89	0.7	20.2	66	6.71	310	clear	no odor	
13:58	2	22.69	0.6	20.2	64	6.55	190	clear	no odor	
14:04	3	33.51	0.4	20.2	63	6.47	100	clear	no odor	
	4									

Sample Collection:

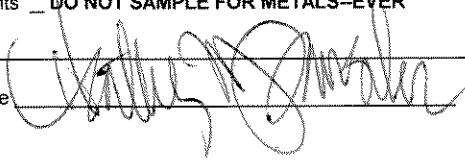
Date Sampled: 8/23/05

Sampling Method: Disposable Bailer/Other Boiled

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-12B	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	14:13

Comments: DO NOT SAMPLE FOR METALS--EVER

Signature: 

Date: 8/23/05

needs new cap + lock



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well Purging: 8/23/05

Date Purged:

Purge Method: Disposable bailer/other groundwater

Casing Material:

PVC

2.00 in.

Well Diameter:

54.99 ft from TOC

Total Depth:

13.26 ft from TOC

Depth to Water:

41.73 ft.

Water Column:

6.67 gal (WC X VF)

Well/Piezo ID: MW-14A

Well  Piezometer 

Field Tech(s): Heather M. Parker

Weather Conditions: warm 70's to 80's

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

9.98 @ 14:40

20.66

80% Recovery from TOC: = Total Depth - (Water Column X .8) =

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm) S/m	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
14:20	0 0.5	7.6	170	20.4	85	6.86	49	clear	no odor	
14:23	1 2.17	3.7	166	21.8	88	6.42	72	clear	no odor	
14:26	2 14.17	5.8	164	21.3	89	6.52	48	clear	no odor	
14:29	3 21.17	2.4	164	21.5	90	6.37	50	clear	no odor	
	4									

Sample Collection: 8/23/05

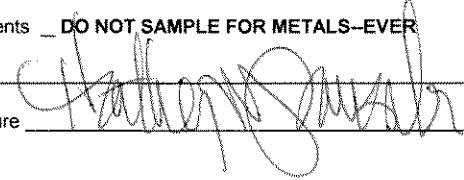
Date Sampled:

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-14A	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	14:42

Comments DO NOT SAMPLE FOR METALS-EVER

Signature  Date 8/23/05

**ENSR**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well Purging: 8/23/05

Date Purged:

Purge Method: Disposable bailer/other

groundfs

Casing Material:

PVC

2.00 in.

Well Diameter:

84.98 ft from TOC

Total Depth:

13.93

ft from TOC

Depth to Water:

7.105

ft.

Water Column:

7.105

gal (WC X VF)

Water Column Volume:

11.34

Well/Piez ID: MW-14B

Well  Piezometer 

Field Tech(s):

Heather TauscherWeather Conditions: warm 70's to 80's

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

13.94 @ 15:1328.54

80% Recovery from TOC: = Total Depth - (Water Column X .8) =

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
14:51	0	0.5	181	20.2	64	7.13	260	clear	no odor	
14:57	1	11.86	180	20.0	65	6.65	370	clear	no odor	
15:03	2	22.86	179	20.0	65	6.49	100	clear	no odor	
15:09	3	33.86	172	20.0	65	6.44	72	clear	no odor	
	4									

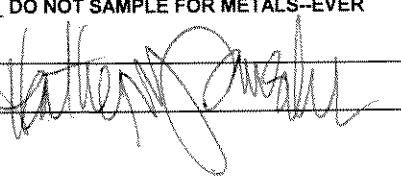
Sample Collection: 8/23/05Date Sampled: 8/23/05

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-14B	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	15:14

Comments \_ DO NOT SAMPLE FOR METALS--EVER

Signature Date 8/23/05

**ENSR.**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-13A

Well  Piezometer 

Well Purging:

Date Purged:

Purge Method: Disposable bailer/other

8-23-05  
Ac  
Disposable bailer pump  
PVC

Field Tech(s):

Troy Wenzham

Weather Conditions:

Sunny (86°F)

Casing Material:

Well Diameter:

2.00 in.

Total Depth:

54.71 ft from TOC

Depth to Water:

11.216

ft from TOC

Water Column:

42.95

ft

Water Column Volume:

4.87

gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 20.35

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
13:30	0 0.5	4.0	108	20.8	69.3	6.0	-5.0	Granular	none	
13:34	1 7.37	0.7	87	19.8	67.7	6.5	-5.0	Brownish	none	
13:38	2 14.37	0.5	85	19.8	65.2	6.5	913	clear	none	
13:42	3 21.37	6.5	98	19.8	67.9	6.3	484	clear	none	
	4									

Sample Collection:

Date Sampled:

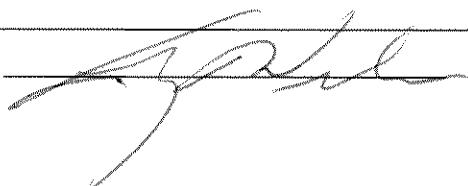
Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-13A	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	13:55

Comments DO NOT SAMPLE FOR METALS--EVER

Signature

 8-23-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well Purging: 8-23-05  
 Date Purged:

Purge Method: Disposable bailer/other  
Gravity pump

Casing Material:

Well Diameter: 2.00 in.

Total Depth: 84.44 ft from TOC

Depth to Water: 15.90 ft from TOCWater Column: 68.54 ft.Water Column Volume: 10.96 gal (WC X VF)

Well/Piezo ID: MW-13B

Well  Piezometer Field Tech(s): Troy WenzelWeather Conditions: Sunny (92°F)

Volume	3/4" = .02	1" = .04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 29.61

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
14:03	0	0.5	153	20.0	666	6.8	54.6	clear	none	
14:04	1	10.40	144	20.1	673	6.5	53.8	cl.	+	
14:15	2	20.40	138	19.9	645	6.4	53.5	cl.	+	
14:21	3	33.40	138	19.9	66.4	6.4	76.7			
	4									

Sample Collection:

Date Sampled: 8-23-05Sampling Method: Disposable Bailer/Other Bailed

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-13B	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	14:35

Comments \_ DO NOT SAMPLE FOR METALS--EVER

Signature J. Hale Date 8-23-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezoe ID: MW-15

Well  Piezometer 

Well Purging: 8-23-05  
 Date Purged: ~~8-23-05~~  
 Purge Method: Disposable bailer/other

Field Tech(s): Troy Wenhorn

Weather Conditions: Sunny (72°F)

Casing Material: PVC  
 Well Diameter: 2.00 in.

Total Depth: 19.94 ft from TOC

Depth to Water: 10.08 ft from TOC

Water Column: 9.86 ft.

Water Column Volume: 1.57 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = ~~7.88~~ 12.06

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
14:42	0	0.5	-61	23.5	49.4	7.2	84	clear	none	
14:43	1	2.07	-43	22.6	50.4	6.8	49	"	"	
14:44	2	4.07	-44	21.9	50.3	6.7	131	"	"	
14:45	3	6.07	-40	21.7	49.9	6.7	430	"	"	
	4									

Sample Collection:

Date Sampled: 8-23-05

Sampling Method: Disposable Bailer/Other

Bail: 6L

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-15	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	17:55

Comments \_ DO NOT SAMPLE FOR METALS--EVER

Signature \_\_\_\_\_

Date 8-23-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piez ID: MW-7

Well  Piezometer 

Well Purging: 8-23-05 (OC)  
 Date Purged: 8-23-05  
 Purge Method: Disposable bailer/other FS-110 pump

Casing Material:

PVC

2.00 in.

Well Diameter: 2.00 in.  
 Total Depth: 23.30 ft from TOC  
 Depth to Water: 10.70 ft from TOC  
 Water Column: 13.8 ft  
 Water Column Volume: 3.8 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 13.22

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
15:05	0	0.5	-64	22.3	544	6.7	77	clear	none	
15:06	1	2.5	-74	21.8	663	6.1	230	"	"	
15:07	2	4.5	-83	21.2	661	6.1	183	"	"	
15:08	3	6.5	-85	20.8	661	6.1	102	"	"	
	4									

Sample Collection:

Date Sampled: 8-23-05

Sampling Method: Disposable Baile/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-7	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	15:20
APRIL ONLY	1	1-Liter Poly	ice	(APRIL ONLY) Dissolved metals (Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature Jah Date 8-23-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

## Well Purging:

Date Purged: 8-24-05 (DC)  
 Purge Method: Disposable bailer/other ES-120

## Casing Material:

Well Diameter: 2.00 in.

Total Depth: 24.24 ft from TOC

Depth to Water: 9.65 ft from TOC

Water Column: 14.59 ft.

Water Column Volume: 2.3 gal (WC X VF)

Well/Piezo ID: MW-9

Well  Piezometer

Field Tech(s):

Troy Warken

Weather Conditions:

Sunny (70°F)

Volume	3/4" = .02	1" = .04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 12.56

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm) <sup>mS/m</sup>	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
9:30	0	0.5	56	20.5	53.4	8.0	1880	Clear	none	
9:31	1	3.0	24	20.7	53.7	8.0	56.9	"	"	
9:32	2	6.0	20	20.6	53.7	8.1	133	"	"	
9:33	3	9.0	17	20.6	53.7	8.1	272			
	4									

## Sample Collection:

Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other Bailed

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-9	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	9:45

Comments DO NOT SAMPLE FOR METALS--EVER

Signature J. Warken

Date 8-24-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-10

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05

Purge Method: Disposable bailer/other  
*(PC) FS 123 pump*

Casing Material:

*PVC*

Well Diameter: 2.00 in.

Total Depth: 24.25 ft from TOC

Depth to Water: 9.26 ft from TOC

Water Column: 14.99 ft.

Water Column Volume: 23 gal (WC X VF)

Field Tech(s):

*Troy Wentham*

Weather Conditions:

*Sunny (72°F)*

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 12.25

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)/ <i>mS/m</i>	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
9:55	0	0.5	150	19.3	53.1	6.1	234	Clear	none	
9:56	1	3.0	152	19.5	53.0	5.9	584	"	"	
9:57	2	6.0	151	19.5	53.1	5.9	48.6	"	"	
9:58	3	9.0	150	19.5	53.0	5.9	42.3	"	"	
	4									

## Sample Collection:

Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-10	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	10:10

Comments DO NOT SAMPLE FOR METALS--EVER

Signature

Date

8-24-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-6

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05

Purge Method: Disposable bailer/other

(PC)  
ODS-120 pump  
PC

Field Tech(s):

Troy Wenzel

Weather Conditions:

Gunny (74°F)

## Casing Material:

Well Diameter: 2.00 in.

Total Depth: 22.90 ft from TOC

Depth to Water: 10.79 ft from TOC

Water Column: 12.71 ft.

Water Column Volume: 1.4 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 13.21

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm) <i>NSA</i>	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
10:37	0	0.5	157	22.3	608	6.0	1/9	clear	none	
10:38	1	2.5	161	21.0	624	5.8	1/2	"	"	
10:39	2	4.5	161	20.8	62.0	5.8	65.5	"	"	
10:40	3	6.5	161	20.9	60.9	5.9	71.4	"	"	
	4									

## Sample Collection:

Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-6	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	10:50
	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments MW-6 locked in parking lot, need to contact 2nd floor occupant for access

Signature

8-24-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-11

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05

Purge Method: Disposable bailer/other

Field Tech(s):

Troy Johnson

Weather Conditions:

Sunny (79°F)

## Casing Material:

Well Diameter: 2.00 in.

Total Depth: 23.05 ft from TOC

Depth to Water: 9.96 ft from TOC

Water Column: 13.09 ft.

Water Column Volume: 2.09 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 12.58

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
11:05	0 0.5	4.4	-53	22.8	82.8	7.2	84.1	Clear	none	
11:06	1 2.59	4.4	-69	22.8	86.5	7.9	62.6	"	"	
11:07	2 4.59	4.4	-79	21.2	86.8	7.1	92.7	"	"	
11:08	3 6.59	1.8	-77	20.9	83.6	7.1	108.0	"	"	
	4									

## Sample Collection:

Date Sampled: 8-24-05

Sampling Method: Disposable Bailor/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-11	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	11:20

Comments DO NOT SAMPLE FOR METALS--EVER

Signature

Date

8-24-05

**ENSR**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-5

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05

Purge Method: Disposable bailer/other

(DC)  
8-10 pms

Field Tech(s):

Troy WenzelWeather Conditions: Sunny (82°F)

## Casing Material:

PVC

Well Diameter: 2.00 in.

Total Depth: 29.80 ft from TOC

Depth to Water: 10.68 ft from TOCWater Column: 19.12 ft.Water Column Volume: 3.0 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 14.50

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
11:35	0.5	5.6	32	20.5	134	6.8	369	Clear	none	
11:37	1.0	2.7	106	20.7	138	6.2	77	"	"	
11:39	2.0	4.1	98	20.5	135	6.3	61	"	"	
11:40	3.0	5.1	91	20.2	131	6.3	76	"	"	

## Sample Collection:

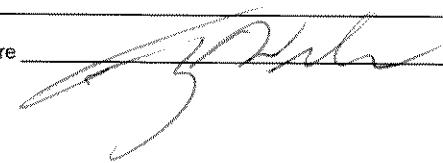
Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-5	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	11:50
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature Date 8-24-05

**ENSR**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-3

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05Purge Method: Disposable bailer/other OG-120 pumpField Tech(s): Troy WalkerWeather Conditions: Sunny (85°F)

## Casing Material:

Well Diameter: 2.00 in.

Total Depth: 33.45 ft from TOC

Depth to Water: 10.90 ft from TOC

Water Column: 22.75 ft.

Water Column Volume: 3.6 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 15.33

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ( $\mu\text{S}/\text{cm}$ )	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
12:00	0	5.7	-111	21.1	999	7.6	17	clear	odorous	
12:02	1	2.1	-102	20.6	1225m	7.9	457	"	"	
12:04	2	8.2	-106	20.9	1295m	7.4	484	"	"	
12:06	3	12.3	-106	21.1	1265m	7.4	355	"	"	
	4									

## Sample Collection:

Date Sampled: 8-24-05Sampling Method: Disposable Bailer/Other Bailer

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	12:20
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature J. R. H.Date 8-24-05



## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-1

Well  Piezometer 

## Well Purging:

Date Purged: 8-24-05

Purge Method: Disposable bailer/other

Field Tech(s):

Troy Wenzel

Weather Conditions:

Sunny (84°F)

Casing Material: PVC

Well Diameter: 2.00 in.

Total Depth: 34.10 ft from TOC

Depth to Water: 11.34 ft from TOC

Water Column: 22.76 ft.

Water Column Volume: 3.7 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 15.89

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
12:24	0	0.5	-76	21.4	861.6	7.6	-5.0	Brown/Cloudy	color present	
12:26	1	2.5	-103	20.5	999.4	7.4	-5.0	" "	" "	
12:28	2	8.2	-109	20.4	1114.5m	7.5	-5.0	" "	" "	
12:30	3	12.3	-117	20.6	1115.5m	7.5	C14	Clear	color present	
	4									

## Sample Collection:

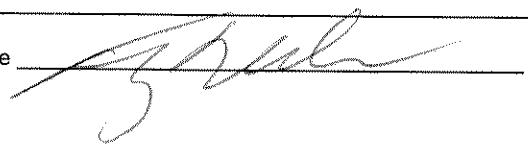
Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-1	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	12:40
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature  Date 8-24-05

**ENSR**

## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No: 06940-268-100  
 Unocal No: 2672

Well/Piezo ID: MW-8

Well  Piezometer 

Well Purging: 8-24-05

Date Purged:

Purge Method: Disposable bailer/other

Field Tech(s): Troy (Whitman)

Weather Conditions: Sunny (85°F)

Casing Material:

Well Diameter: 2.00 in.

Total Depth: 26.70 ft from TOC

Depth to Water: 16.61 ft from TOC

Water Column: 15.09 ft

Water Column Volume: 2.4 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 14.63

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm) <i>in situ</i>	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
12:53	0	0.5	-123	21.4	862	7.7	120	clear	odorous	
12:54	1	0.8	-101	21.5	880	7.5	208	"	"	
12:55	2	0.0	-107	20.9	826	7.5	242	"	"	
12:56	3	0.0	-107	20.7	99.0	7.4	182	"	"	
	4									

Sample Collection:

Date Sampled: 8-24-05

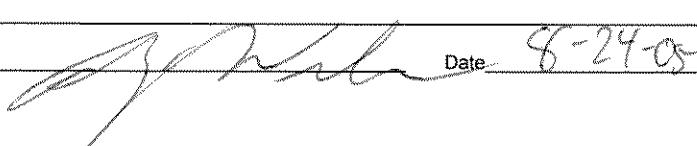
Sampling Method: Disposable Bailer/Other

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-8	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	13:06
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature \_\_\_\_\_ Date 8-24-05





## GROUNDWATER SAMPLING DATA SHEET

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672

Well/Piezo ID: MW-2

Well  Piezometer 

Well Purging: 8-24-05 (DO)  
 Date Purged: 8-24-05  
 Purge Method: Disposable bailer/other Hand pump

Field Tech(s): Troy WhalenWeather Conditions: Sunny (84°F)

Casing Material: PVC

Well Diameter: 2.00 in.

Total Depth: 34.15 ft from TOC

Depth to Water: 11.11 ft from TOC

Water Column: 23.04 ft.

Water Column Volume: 3.1 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 15.71

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (µS/cm) <i>Spec</i>	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
13:19	0	5.1	-703	20.3	138	7.5	50	greenish	slightly cloudy	
13:21	1	6.9	-102	20.0	103	7.6	50	yellow	slightly cloudy	
13:23	2	6.2	-120	20.2	128	7.5	50	yellow	slightly cloudy	
13:25	3	12.3	-722	20.4	157	7.5	50	yellow	slightly cloudy	
	4									

## Sample Collection:

Date Sampled: 8-24-05

Sampling Method: Disposable Bailer/Other Bail

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-2	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	13:35
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals (Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments \_\_\_\_\_

Signature J. Whalen Date 8-24-05



## **GROUNDWATER SAMPLING DATA SHEET**

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
ENSR No. 06940-268-100  
Unocal No. 2672

Well Purging: 8/24/05 (C)  
Date Purged:  
Purge Method: Disposable bailer/other 09-120 pump

Casing Material: PVC  
 Well Diameter: 2.00 in.  
 Total Depth: 29.50 ft from TOC  
 Depth to Water: 10.28 ft from TOC  
 Water Column: 19.72 ft  
 Water Column Volume: 3.0 gal (WC X VF)

Well/Piezo ID: MW-4

Well  Piezometer

Field Tech(s): Troy Weyman

Weather Conditions: Sunny (85°)

Volume	$3/4"$	= .02	$1"$	= .04	$2"$	= .16	$3"$	= .38
Factor (VF)	$4"$	= .66	$5"$	= 1.02	$6"$	= 1.50	$12"$	= 5.80

$$80\% \text{ Recovery from TOC: } = \text{Total Depth} - (\text{Water Column} \times .8) = 14.12$$

### **Sample Collection:**

Date Sampled: 8-29-08

**Sampling Method: Disposable Bailer/Other**

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-4	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8260), 5-Oxys (8260), 1,2-DCA (8260)	14:10
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metals(Chromium, Vanadium, Selenium, Lead, Molybdenum)	
APRIL ONLY	1	1-Liter Poly	Ice	(APRIL ONLY) Dissolved metal (Uranium)	
				*NOTE* Sample for Dissolved Metals Annually (April Only)	

Comments DO NOT SAMPLE WELL IF FREE PRODUCT IS PRESENT

**Signature**

Date 0-2905



**ATTACHMENT C**

**LABORATORY ANALYTICAL RESULTS WITH  
CHAIN-OF-CUSTODY DOCUMENTATION**

# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

August 31, 2005

**CLS Work Order #: COH0865**  
**COC #: No Number**

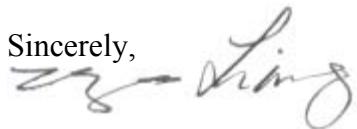
Margret Riggan  
ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

**Project Name: FormerUnocal2672,1075**  
**SantaRosaAve.,SantaRosa,CA**

Enclosed are the results of analyses for samples received by the laboratory on 08/25/05 10:08. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.  
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233



# CHAIN OF CUSTODY

Page 1 of 1

Lab: CLS

TAT: Standard

CATHA865

## Report results to:

Name: Margaret Riggan  
 Company: ENSR  
 Mailing Address: 10411 Old Placerville Road, Suite 210  
 City, State, Zip: Sacramento, CA 95827-2508  
 Telephone No.: 916-362-7100  
 Fax No.: 916-362-8100

## Project Information

Site Address: 1075 Santa Rosa Ave., Santa Rosa, CA 94503  
 ENSR No. 06940-268-100  
 Unocal No. 2672  
 Global ID No. T0609700603

## Special instructions and/or specific regulatory requirements:

## METALS: Second Quarter

Metals samples filtered, collect in two 1-Liter Polys  
 Non-preserved.

Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts.	Analyses Requested										
					TPHg (8015)	BTEX (8260)	5-Oxys / TBBA / MTBE / DIPE (8260)	ETBE / TAME / 1,2-DCA (8260)	Chromium, Vanadium, Selenium (Filtered)	Lead, Molybdenum (Filtered)	Uranium (Filtered)				
MW-1	8-24-05	12:40	GW	3	X X X X X										Ice/HCL
MW-2	8-24-05	13:35	GW	3	X X X X X										Ice/HCL
MW-3	8-24-05	12:20	GW	3	X X X X X										Ice/HCL
MW-4	8-24-05	14:16	GW	3	X X X X X										Ice/HCL
MW-5	8-24-05	11:50	GW	3	X X X X X										Ice/HCL
MW-6	8-24-05	10:50	GW	3	X X X X X										Ice/HCL
MW-7	8-23-05	15:20	GW	3	X X X X X										Ice/HCL
MW-8	8-24-05	13:06	GW	3	X X X X X										Ice/HCL
MW-9	8-24-05	9:45	GW	3	X X X X X										Ice/HCL
MW-10	8-24-05	10:10	GW	3	X X X X X										Ice/HCL
MW-11	8-24-05	11:20	GW	3	X X X X X										Ice/HCL
MW-12A	8-23-05	13:34	GW	3	X X X X X										Ice/HCL
MW-12B	8-23-05	14:13	GW	3	X X X X X										Ice/HCL
MW-13A	8-23-05	13:55	GW	3	X X X X X										Ice/HCL
MW-13B	8-23-05	14:35	GW	3	X X X X X										Ice/HCL
MW-14A	8-23-05	14:42	GW	3	X X X X X										Ice/HCL
MW-14B	8-23-05	15:16	GW	3	X X X X X										Ice/HCL
MW-15	8-23-05	14:55	GW	3	X X X X X										Ice/HCL
QA		Liquid			X X										Ice/HCL

Collected by:

*Troy Weller*

Date/Time 8-23-24-05

Collector's Signature:

*Troy Weller* Date/Time 8-23-24-05

Relinquished by:

*Troy Weller*

Date/Time 8-25-05/10:08

Received by:

*Troy Weller* Date/Time

Relinquished by:

Date/Time

Received by:

*Troy Weller* Date/Time 8-25-05/10:08

Method of Shipment:

Sample Condition on Rcpt:

5

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (COH0865-01) Water Sampled: 08/24/05 12:40 Received: 08/25/05 10:08</b>									
Gasoline	2400	500	µg/L	10	CO06571	08/26/05	08/26/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas)	97.5 %	65-135		"	"	"	"		
<b>MW-2 (COH0865-02) Water Sampled: 08/24/05 13:35 Received: 08/25/05 10:08</b>									
Gasoline	15000	1000	µg/L	20	CO06573	08/29/05	08/29/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas)	88.5 %	65-135		"	"	"	"		
<b>MW-3 (COH0865-03) Water Sampled: 08/24/05 12:20 Received: 08/25/05 10:08</b>									
Gasoline	1200	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas)	228 %	65-135		"	"	"	"		S-04
<b>MW-4 (COH0865-04) Water Sampled: 08/24/05 14:10 Received: 08/25/05 10:08</b>									
Gasoline	47000	5000	µg/L	100	CO06573	08/29/05	08/29/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas)	89.5 %	65-135		"	"	"	"		
<b>MW-5 (COH0865-05) Water Sampled: 08/24/05 11:50 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)	107 %	65-135		"	"	"	"		
<b>MW-6 (COH0865-06) Water Sampled: 08/24/05 10:50 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)	104 %	65-135		"	"	"	"		
<b>MW-7 (COH0865-07) Water Sampled: 08/23/05 15:20 Received: 08/25/05 10:08</b>									
Gasoline	230	50	µg/L	1	CO06528	08/26/05	08/26/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas)	97.5 %	65-135		"	"	"	"		

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (COH0865-08) Water Sampled: 08/24/05 13:06 Received: 08/25/05 10:08</b>									
Gasoline	16000	500	µg/L	10	CO06528	08/26/05	08/26/05	EPA 8015M	GC-25
Surrogate: o-Chlorotoluene (Gas) 112 % 65-135 " " " "									
<b>MW-9 (COH0865-09) Water Sampled: 08/24/05 09:45 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06528	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 92.0 % 65-135 " " " "									
<b>MW-10 (COH0865-10) Water Sampled: 08/24/05 10:10 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 110 % 65-135 " " " "									
<b>MW-11 (COH0865-11) Water Sampled: 08/24/05 11:20 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 106 % 65-135 " " " "									
<b>MW-12A (COH0865-12) Water Sampled: 08/23/05 13:34 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 106 % 65-135 " " " "									
<b>MW-12B (COH0865-13) Water Sampled: 08/23/05 14:13 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 105 % 65-135 " " " "									
<b>MW-13A (COH0865-14) Water Sampled: 08/23/05 13:55 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas) 105 % 65-135 " " " "									

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-13B (COH0865-15) Water Sampled: 08/23/05 14:35 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
<i>Surrogate: o-Chlorotoluene (Gas)</i>		106 %	65-135		"	"	"	"	
<b>MW-14A (COH0865-16) Water Sampled: 08/23/05 14:42 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
<i>Surrogate: o-Chlorotoluene (Gas)</i>		102 %	65-135		"	"	"	"	
<b>MW-14B (COH0865-17) Water Sampled: 08/23/05 15:16 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
<i>Surrogate: o-Chlorotoluene (Gas)</i>		107 %	65-135		"	"	"	"	
<b>MW-15 (COH0865-18) Water Sampled: 08/23/05 14:55 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
<i>Surrogate: o-Chlorotoluene (Gas)</i>		104 %	65-135		"	"	"	"	
<b>QA (COH0865-19) Water Sampled: 08/25/05 00:00 Received: 08/25/05 10:08</b>									
Gasoline	ND	50	µg/L	1	CO06571	08/26/05	08/26/05	EPA 8015M	
<i>Surrogate: o-Chlorotoluene (Gas)</i>		104 %	65-135		"	"	"	"	

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (COH0865-01) Water Sampled: 08/24/05 12:40 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	5.0	µg/L	10	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
<b>Benzene</b>	<b>300</b>	5.0	"	"	"	"	"	"	
<b>Toluene</b>	<b>120</b>	5.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>150</b>	5.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>150</b>	10	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		93.5 %		72-125		"	"	"	
<b>MW-2 (COH0865-02) Water Sampled: 08/24/05 13:35 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	25	µg/L	50	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>400</b>	25	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	250	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
<b>Benzene</b>	<b>2900</b>	25	"	"	"	"	"	"	
<b>Toluene</b>	<b>140</b>	25	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>580</b>	25	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>990</b>	50	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		89.7 %		72-125		"	"	"	

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (COH0865-03) Water Sampled: 08/24/05 12:20 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>48</b>	0.50	"	"	"	"	"	"	
<b>tert-Amyl methyl ether</b>	<b>1.8</b>	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<b>1,2-Dichloroethane</b>	<b>2.5</b>	0.50	"	"	"	"	"	"	
Benzene	13	0.50	"	"	"	"	"	"	
Toluene	4.3	0.50	"	"	"	"	"	"	
Ethylbenzene	36	0.50	"	"	"	"	"	"	
Xylenes (total)	26	1.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		90.6 %		72-125		"	"	"	
<b>MW-4 (COH0865-04) Water Sampled: 08/24/05 14:10 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	50	µg/L	100	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>56</b>	50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
Benzene	8500	50	"	"	"	"	"	"	
Toluene	1700	50	"	"	"	"	"	"	
Ethylbenzene	1000	50	"	"	"	"	"	"	
Xylenes (total)	5700	100	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		88.8 %		72-125		"	"	"	

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-5 (COH0865-05) Water Sampled: 08/24/05 11:50 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>0.71</b>	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		90.7 %		72-125	"	"	"	"	
<b>MW-6 (COH0865-06) Water Sampled: 08/24/05 10:50 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		92.4 %		72-125	"	"	"	"	

# CALIFORNIA LABORATORY SERVICES

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ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (COH0865-07) Water Sampled: 08/23/05 15:20 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Surrogate: Toluene-d8                          92.0 %                          72-125                          "                          "                          "                          "

## MW-8 (COH0865-08) Water Sampled: 08/24/05 13:06 Received: 08/25/05 10:08

Di-isopropyl ether	ND	50	µg/L	100	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
Benzene	1300	50	"	"	"	"	"	"	
Toluene	100	50	"	"	"	"	"	"	
Ethylbenzene	290	50	"	"	"	"	"	"	
Xylenes (total)	230	100	"	"	"	"	"	"	

Surrogate: Toluene-d8                          91.9 %                          72-125                          "                          "                          "                          "

# CALIFORNIA LABORATORY SERVICES

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ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-9 (COH0865-09) Water Sampled: 08/24/05 09:45 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		92.3 %		72-125		"	"	"	
<b>MW-10 (COH0865-10) Water Sampled: 08/24/05 10:10 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>									
		90.7 %		72-125		"	"	"	

# CALIFORNIA LABORATORY SERVICES

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ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-11 (COH0865-11) Water Sampled: 08/24/05 11:20 Received: 08/25/05 10:08**

Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Surrogate: Toluene-d8

92.9 %      72-125      "      "      "

**MW-12A (COH0865-12) Water Sampled: 08/23/05 13:34 Received: 08/25/05 10:08**

Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<b>1,2-Dichloroethane</b>	<b>23</b>	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Surrogate: Toluene-d8

94.1 %      72-125      "      "      "

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve,SantaRosa,CA  
Project Number: 06940-268-100  
Project Manager: Margret Riggan  
**CLS Work Order #: COH0865**

# Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-12B (COH0865-13) Water   Sampled: 08/23/05 14:13   Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06419	08/25/05	08/25/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	1.0	"	"	"	"	"	"	"

MW-13A (COH0865-14) Water Sampled: 08/23/05 13:55 Received: 08/25/05 10:08

<b>Di-isopropyl ether</b>	<b>1.0</b>	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"
<b>1,2-Dichloroethane</b>	<b>0.64</b>	0.50	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"
Xylenes (total)	ND	1.0	"	"	"	"	"	"

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-13B (COH0865-15) Water Sampled: 08/23/05 14:35 Received: 08/25/05 10:08</b>									
Di-isopropyl ether	ND	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Surrogate: Toluene-d8                          96.5 %                          72-125                          "                          "                          "                          "

**MW-14A (COH0865-16) Water Sampled: 08/23/05 14:42 Received: 08/25/05 10:08**

Di-isopropyl ether	ND	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>20</b>	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<b>1,2-Dichloroethane</b>	<b>9.8</b>	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Surrogate: Toluene-d8                          94.5 %                          72-125                          "                          "                          "                          "

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: Former Unocal 2672, 1075 Santa Rosa Ave, Santa Rosa, CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-14B (COH0865-17) Water Sampled: 08/23/05 15:16 Received: 08/25/05 10:08**

Di-isopropyl ether	ND	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

*Surrogate: Toluene-d8*

93.6 %      72-125      "      "      "

**MW-15 (COH0865-18) Water Sampled: 08/23/05 14:55 Received: 08/25/05 10:08**

Di-isopropyl ether	ND	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

*Surrogate: Toluene-d8*

94.1 %      72-125      "      "      "

# CALIFORNIA LABORATORY SERVICES

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ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margret Riggan

## Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>QA (COH0865-19) Water Sampled: 08/25/05 00:00 Received: 08/25/05 10:08</b>									
Benzene	ND	0.50	µg/L	1	CO06450	08/26/05	08/26/05	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		125 %	66-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96.3 %	72-125		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	73-125		"	"	"	"	

# CALIFORNIA LABORATORY SERVICES

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Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CO06528 - EPA 5030 Water GC

<b>Blank (CO06528-BLK1)</b>					Prepared: 08/26/05	Analyzed: 08/30/05				
Gasoline	ND	50	µg/L							
Surrogate: o-Chlorotoluene (Gas)	19.3	"		20.0		96.5	65-135			
<b>LCS (CO06528-BS1)</b>					Prepared: 08/26/05	Analyzed: 08/30/05				
Gasoline	481	50	µg/L	500		96.2	65-135			
Surrogate: o-Chlorotoluene (Gas)	20.2	"		20.0		101	65-135			
<b>LCS Dup (CO06528-BSD1)</b>					Prepared: 08/26/05	Analyzed: 08/30/05				
Gasoline	523	50	µg/L	500		105	65-135	8.37	30	
Surrogate: o-Chlorotoluene (Gas)	19.9	"		20.0		99.5	65-135			

### Batch CO06571 - EPA 5030 Water GC

<b>Blank (CO06571-BLK1)</b>					Prepared & Analyzed: 08/26/05					
Gasoline	ND	50	µg/L							
Surrogate: o-Chlorotoluene (Gas)	22.5	"		20.0		112	65-135			
<b>LCS (CO06571-BS1)</b>					Prepared & Analyzed: 08/26/05					
Gasoline	440	50	µg/L	500		88.0	65-135			
Surrogate: o-Chlorotoluene (Gas)	20.9	"		20.0		104	65-135			
<b>LCS Dup (CO06571-BSD1)</b>					Prepared & Analyzed: 08/26/05					
Gasoline	447	50	µg/L	500		89.4	65-135	1.58	30	
Surrogate: o-Chlorotoluene (Gas)	22.6	"		20.0		113	65-135			
<b>Matrix Spike (CO06571-MS1)</b>					Source: COH0865-18	Prepared & Analyzed: 08/26/05				
Gasoline	408	50	µg/L	500	ND	81.6	68-132			
Surrogate: o-Chlorotoluene (Gas)	21.6	"		20.0		108	65-135			

# CALIFORNIA LABORATORY SERVICES

08/31/05 15:11

ENSR - Sacramento  
10411 Old Placerville Rd., Suite 210  
Sacramento, CA 95827-2508

Project: FormerUnocal2672,1075SantaRosaAve, SantaRosa,CA  
Project Number: 06940-268-100  
CLS Work Order #: COH0865  
Project Manager: Margaret Riggan

## TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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### Batch CO06571 - EPA 5030 Water GC

Matrix Spike Dup (CO06571-MSD1)	Source: COH0865-18	Prepared & Analyzed: 08/26/05							
Gasoline	453	50	µg/L	500	ND	90.6	68-132	10.5	32
Surrogate: o-Chlorotoluene (Gas)	22.2		"	20.0		111	65-135		

### Batch CO06573 - EPA 5030 Water GC

Blank (CO06573-BLK1)	Prepared: 08/29/05 Analyzed: 08/31/05						
Gasoline	ND	50	µg/L				
Surrogate: o-Chlorotoluene (Gas)	19.0		"	20.0		95.0	65-135

LCS (CO06573-BS1)	Prepared: 08/29/05 Analyzed: 08/31/05						
Gasoline	531	50	µg/L	500		106	65-135
Surrogate: o-Chlorotoluene (Gas)	20.4		"	20.0		102	65-135

LCS Dup (CO06573-BSD1)	Prepared: 08/29/05 Analyzed: 08/31/05						
Gasoline	459	50	µg/L	500		91.8	65-135
Surrogate: o-Chlorotoluene (Gas)	20.6		"	20.0		103	65-135

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## Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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### Batch CO06419 - EPA 5030 Water MS

#### Blank (CO06419-BLK1)

Prepared & Analyzed: 08/25/05

Di-isopropyl ether	ND	0.50	µg/L							
Ethyl tert-butyl ether	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
Tert-butyl alcohol	ND	5.0	"							
<i>Surrogate: Toluene-d8</i>	9.17		"	10.0		91.7		72-125		

#### LCS (CO06419-BS1)

Prepared & Analyzed: 08/25/05

Methyl tert-butyl ether	20.3	0.50	µg/L	20.0		102	52-130			
<i>Surrogate: Toluene-d8</i>	10.4		"	10.0		104	72-125			

#### LCS Dup (CO06419-BSD1)

Prepared & Analyzed: 08/25/05

Methyl tert-butyl ether	19.7	0.50	µg/L	20.0		98.5	52-130	3.00	30	
<i>Surrogate: Toluene-d8</i>	9.80		"	10.0		98.0	72-125			

### Batch CO06450 - EPA 5030 Water MS

#### Blank (CO06450-BLK1)

Prepared & Analyzed: 08/26/05

Di-isopropyl ether	ND	0.50	µg/L							
Benzene	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Tert-butyl alcohol	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
<i>Surrogate: Toluene-d8</i>	9.50		"	10.0		95.0	72-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	11.2		"	10.0		112	66-135			
<i>Surrogate: Toluene-d8</i>	9.50		"	10.0		95.0	72-125			

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Project Manager: Margret Riggan

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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### Batch CO06450 - EPA 5030 Water MS

Blank (CO06450-BLK1)						Prepared & Analyzed: 08/26/05				
Surrogate: 4-Bromofluorobenzene	10.6		µg/L	10.0		106	73-125			
LCS (CO06450-BS1)						Prepared & Analyzed: 08/26/05				
Benzene	22.3	0.50	µg/L	20.0		112	0-200			
Toluene	21.0	0.50	"	20.0		105	0-200			
Methyl tert-butyl ether	23.4	0.50	"	20.0		117	52-130			
Surrogate: Toluene-d8	10.3		"	10.0		103	72-125			
Surrogate: 1,2-Dichloroethane-d4	9.82		"	10.0		98.2	66-135			
Surrogate: Toluene-d8	10.3		"	10.0		103	72-125			
Surrogate: 4-Bromofluorobenzene	9.36		"	10.0		93.6	73-125			
LCS Dup (CO06450-BSD1)						Prepared & Analyzed: 08/26/05				
Benzene	19.0	0.50	µg/L	20.0		95.0	0-200	16.0	200	
Toluene	17.7	0.50	"	20.0		88.5	0-200	17.1	200	
Methyl tert-butyl ether	23.6	0.50	"	20.0		118	52-130	0.851	30	
Surrogate: Toluene-d8	10.2		"	10.0		102	72-125			
Surrogate: 1,2-Dichloroethane-d4	10.2		"	10.0		102	66-135			
Surrogate: Toluene-d8	10.2		"	10.0		102	72-125			
Surrogate: 4-Bromofluorobenzene	9.35		"	10.0		93.5	73-125			

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## Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

GC-25 Weathered gasoline.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference